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ORIGINAL COMMUNICATIONS.

REMARKS ON CLINICAL CASES.

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THE TREATMENT OF HYPERPYREXIA BY COLD APPLICATIONS TO THE ABDOMEN.

GENTLEMEN,—The case now before you is one of typhoid fever, only remarkable for a sustained high temperature persisting in spite of various remedies. The temperature in the morning was 103° F., and occasionally 102°, in the axilla, but for nearly a week the evening temperature remained at 104°; one night it was 104.8°. As there had been no marked exacerbations in the temperature, we looked upon it as a case of grave character, on account of the sustained fever. With reference to the intestinal lesions, as manifested at least by the occurrence of symptoms of bowel-disorder, they were not severe: he had only three or four stools a day. The eruption was well defined, but there is nothing in the case to which I wish to call your attention besides the temperature record.

Let us see his present condition. His temperature this morning is 100½°; last night it was 101½°. I therefore think that the disease is yielding. The bowels have not been opened for thirty-six hours, and tend to constipation. He is very deaf, but obeys intelligently when I can make him hear. His tongue is moderately dry and slightly fissured; it is tremulously protruded. I want you to observe this cracked, dry condition, with the yellowish coating upon it: though it is not very dry, it still impresses you as a dry tongue. His abdomen is rather prominent and tender; a few spots of eruption are still visible upon the surface. There has been some atony of the bladder, so that the urine has had to be frequently drawn with the catheter. Examining his heart, I notice that there is almost complete extinction of the first sound; it can just barely be heard. The pulse beats now only one hundred in the minute, even with the excitement of coming before you; but, as I see upon the record, it has never been a rapid pulse. It is compressible, but has decidedly more volume than it had a few days since. His general condition is improving with the reduction in the temperature. He has been taking dilute muriatic acid (gtt. v) and turpentine (℥x) every two hours. He also takes twelve grains of quinine daily; and six ounces of wine and six of whiskey: therefore he is freely stimulated. His food consists of milk and beef-tea, two pints of each in the twenty-four hours.

Now I have given you a statement of his treatment, with a single exception, and that is what I wish to develop in our discussion,—viz., the treatment of the high temperature. When I found that this man had, a week ago, an evening temperature remaining persistently at 104°, I tried to reduce it by large doses of quinine,—sixteen grains daily; and on one day he took ten grains morning and evening. He was also frequently sponged with cold water. The effect was but slight; the temperature remained high. I then directed that cloths wrung out of ice-water should be laid upon the abdomen until the desired result was obtained. It was found that this was more efficient, and the temperature was at once reduced to 100°, so that by this means we were enabled to keep the temperature within bounds, and thus to gain time. We discussed the expediency of putting him in a bath, but, as he was very weak, and the bath-room is some distance from his bed, rather than subject him to the risks of so much handling, we yielded the point, though, if the bath had been more convenient, I would have preferred it. I wish to call your attention especially to the use of ice-water applications to reduce temperature, as a substitute for the large doses of quinine, and cold baths, which are not always convenient. It is a most instructive case. Indeed, I consider that the man's life has been saved by this means. Taking into consideration the rising temperature and the failing circulation, as shown by the impaired heart-sounds, it did seem likely that the case would not get well. I would also call your attention to the fact that in this case the quinine failed to reduce the temperature. It does not often fail, but it did here.

Another point is this deafness which you have observed. I almost had to shout to him before he put his tongue out. The resident physician tells me that he has been so ever since he came in; therefore it was not the effect of the quinine. Deafness in typhoid fever is not uncommon, and I may state that it does not contra-indicate the use of quinine; by no means. It is due to the state of the blood and the impaired nervous system. We also note here that he has a constant tendency to stupor, is rather drowsy and heavy; he sleeps well at night without opium; he has not been delirious, and has not suffered with headache. The deafness, therefore, is the only symptom referable to the nervous system. There is very little if any jerking of the tendons or tremor.

Now, gentlemen, with regard to the treatment, I shall make a slight modification. Quinine need only be given in tonic doses. We will order him to take eight grains daily. The dry tongue indicates that the turpentine is still useful; the amount of acid is so small that it does not make much difference whether it be continued or not, but, as it is grateful to the stomach and aids digestion, we will continue it also. Sponging of the general surface with water will be done several times a day, as heretofore; and if the temperature again rises we will return to the ice-water applications. With regard to the amount of stimulant, although it seem large, yet I will not yet reduce it, on account of his dry tongue and weak heart. I think that just now it would be dangerous to make any change.

HEART- AND KIDNEY-DISEASE DEPENDENT UPON LEAD-POISONING.

I made some remarks upon this case at the last clinic. I then told you that it was a case of lead-poisoning, heart-disease, with lung-complication and contracted kidneys. He is a fresco-painter, 48 years of age, and told us that he had had several attacks of lead colic from the inhalation of white lead, which he sometimes uses in his business to dust on a fresh-painted surface. He had the blue line upon his gums. He was vomiting at our last meeting, and I gave him, as you remember, a mixture of carbolic acid (gr. $\frac{1}{4}$), morphia (gr. $\frac{1}{32}$), in equal parts of mucilage of acacia and peppermint-water. Now his sick stomach has passed away, although his tongue is still coated and his bowels are constipated. He has also been taking strychnia (gr. $\frac{1}{50}$, t.i.d), which appears to have been useful, as he says that he feels better.

I find, upon listening to his chest, that he has a dilated heart, for which the strychnia is pre-eminently a good remedy, and, moreover, it acts as a tonic upon the nervous system, and locally upon the digestive apparatus. The question now is, Is the dose large enough? I think not. We will make it a thirtieth of a grain three times a day. Just here also arises this question, whether or not, considering the state of the kidneys and the fact that his stomach is now in better condition, it is advisable to give him something besides to act more directly upon the kidneys. I think so. We will give him Basham's mixture, two drachms thrice daily, and if we find that it is tolerated by the stomach we can increase it to a tablespoonful.

I will now call your attention to some interesting points in the pathology of this case. First, we have the history of lead-poisoning, his statement being that he believed that it entered his system by inhalation while dusting on white lead with his hands in fresco-painting. Lead enters the system by many different routes,—through the lungs, as well as through the skin. People who labor in lead-works sometimes come home and eat with dirty hands, and thus introduce the lead into the stomach, or it may be in the drinking-water. One or two small doses of lead of course do not do much harm, but the persistent, continuous introduction of lead produces poisoning. In this case it may have been introduced by the bronchial mucous membrane.

This was one of the points. The others are these: What connection exists, if any, between the structural lesions which we find here in the heart and the kidney? Lead is a factor in the production of disease of the kidney which is often overlooked. Lead produces chronic renal disorder, leading to contracted kidney, and persons who drink water from lead pipes often get Bright's disease in this way. I cannot tell you how many cases I have seen of this kind, since my attention was first directed to this subject, where chronic tubal nephritis had been set up by the action of the lead. It causes a slow process of inflammation in the kidneys, leading to degenerating epithelium and increase of connective tissue, with secondary changes, the most marked being contraction.

As regards the disease of the heart, it is certain that similar changes to those in the kidney may be set up in the walls of the heart, connected with its growth, causing either atrophy or hypertrophy of muscular structure with or without increase of fibrous tissue as a result of the presence of lead in the system. The lung-complication is due to passive congestion, owing to the state of the circulation and heart-failure, and this is also the explanation of the gastric disturbance. You possibly may think that I might improve on this treatment by giving iodide of potassium instead of Basham's mixture, but I am quite sure that the stomach will not tolerate it at present. I may, however, order it should he seem able to bear it.

ACUTE ERYSIPELAS: REMARKABLE RESULT FROM PILOCARPINE.

I have here a case to show you which I think will interest you, as it brings out rather a novel treatment of erysipelas. I intended to exhibit this to you this morning as a case of erysipelas, but I find that the erysipelas is gone. I, therefore, can only speak of the treatment, which has proved more quickly efficacious than I supposed it would.

This man, B. K., 32 years of age, a fireman, was admitted only day before yesterday. This is the record upon admission: "He says that he was quite well yesterday (November 12), but did not go to work, as he was celebrating the election. In the evening, according to his statement, he was not drunk, though he had been drinking a little, and became engaged in a very earnest political discussion, when some one, equally earnest, struck him in the right eye, making a bruise on the cheek and a small lacerated wound of the eyebrow," the evidence of which you may see for yourselves. The man at that time was quite well, although under the influence of liquor. "During the night he had much pain in his eye, and in the morning the eyelids were œdematous and the cheek likewise swollen, red, and burning." When he applied for admission the inflammation was confined to the right side of the face, but it spread rapidly, and the same afternoon both eyes were closed. It is worth adding to this history that he had slept out all Wednesday night after receiving the injury. He was admitted on Thursday morning with erysipelas of the upper part of the face, which was rapidly spreading over the brow. His pulse was 80; temperature, 102.8°; respiration, 22. The urine was examined with a negative result. He was ordered tincture of the chloride of iron, twenty drops every three hours, but only received one dose; as the disease was rapidly spreading, and something was needed to make a prompt impression, I used another and more active agent. This was not the first case in which I had used this remedy, but it was the first in which I obtained such rapid relief. He received hypodermically one-sixth of a grain of the muriate of pilocarpine. The result was remarkable. Here is the temperature record: the temperature fell from 102° to 99½°. He sweat profusely for an hour and a half, and there was no further development of the erysipelas; not only did it not spread further, but what did exist quickly subsided. No local treatment was employed, not even cold applications; therefore whatever success was obtained was from the pilocarpine.

I call your attention to this treatment of erysipelas. I said that it had not been my first case, although it was the most striking case I have seen. As long as five years ago I used jaborandi in the treatment of erysipelas until sweating was produced, and, I thought, with the result of checking further development. In one case with high temperature the disease had already made some headway, and did not subside so quickly. Under the use of iron the disease had not been controlled, but the fluid extract of jaborandi, given every two hours, checked it. I have since used the jaborandi in connection with the iron at times with good results. This is, therefore, not a new treatment with me, as I have used it for some time. Jaborandi and pilocarpine, its active principle, are, of course, similar in their effects.

I have called your attention to this treatment not because I believe that it will be followed by the same result in every case, but because it is worthy of a trial. If you get a case of erysipelas in its beginning, use pilocarpine. It has saved this man a long and dangerous illness, and, as he had been drinking, as he says he had, the results might have been serious. In the use of this treatment it should be borne in mind that, in order to be fully effective, profuse sweating must be produced.

TWO CASES OF MALARIAL CACHEXIA.

I have next to show you two cases somewhat similar, and I will have them both in together. I will be able to merely finish the clinical record of these cases to-day, and must defer any extended remarks upon them to another occasion. They are both instances of malarial cachexia.

This one is Charles Z., 29 years of age, a German, who works at china-painting. He says that he works with metallic pigments, but not with lead. He states that he is temperate, and usually healthy. He came to this country about ten months ago and went to work as a clerk in a store near Charleston, South Carolina, on James's Island. After he had been there a couple of months he suffered with headache, chills and fever, and prostration,—undoubtedly a malarial impression. He took medicine, but with temporary relief, and was obliged to leave. He came to Philadelphia, and two months later he entered this hospital for treatment for intermittent fever, and remained here nearly three months. The notes taken at that time only speak of him as a malarial subject. When he left here he was weak and pale, but did not have chills. Subsequently he suffered with increasing weakness, loss of appetite, and irregular fever. The malarial poison had evidently not been entirely eradicated.

He was re-admitted November 12. Two weeks before this he had headache and fever, and was obliged to give up his work. Upon admission he was slightly jaundiced, as you may still observe. His tongue was pale and his lips looked pale. The appetite was fairly good, bowels generally constipated. His urine contained bile-pigment, but was not albuminous; it was acid, sp. gr. 1020, and contained phosphates in excess. His anæmia is still quite marked. He has a slight cough. I find that his lungs are clear upon percussion; and upon auscultation I can only find anteriorly some harshness of respiration upon the left side, and posteriorly there is diffused harsh breathing on the right as well as the left side. He has, therefore, some catarrh of the bronchial tubes. He has no expectoration. There is no disease of the heart, which, however, is rapidly acting under the excitement of the moment. There is no murmur; the first sound at the left base is murmurish, but is not distinctly replaced by a murmur. The heart is not enlarged. The splenic dulness extends below the margin of the ribs about a finger's breadth; also is it increased towards the median line, below the costal border. It does not extend markedly upwards. Hepatic dulness is very slightly increased over the left lobe. There is no ascites.

A microscopic examination of the blood showed that the number of the cells is reduced, while the relative proportion of the white and red corpuscles is preserved, and the corpuscles are not changed. The case is one of pure anæmia accompanying malarial cachexia with slightly enlarged spleen. This man is taking at present sulphate of iron with carbonate of potassium (gr. jss each) in a pill three times daily. He has a good appetite, and has had no chill at all since admission; his temperature also is normal. In addition to this treatment, as his condition is good and his bowels constipated, we will give him, in a pill, podophyllin, gr. $\frac{1}{8}$, extract of hyoscyamus, gr. ij, each night, and an additional pill in the morning if needed.

The second case is one which you do not see quite in the intensity that it exhibited upon admission. He entered the ward on November 7. He is 19 years of age, and had worked on a farm near Baltimore until ten weeks before, when he was taken sick with tertian intermittent. This was temporarily stopped by quinine, but afterwards the chills returned each day. The malarial cachexia was marked upon his admission. There was marked enlargement of the liver, the percussion-dulness extending two inches below the border of the ribs. But more marked even than this enlargement of the liver was the enlargement of the spleen, which still exists. The area of splenic dulness extends downwards to within one inch of the crest of the ilium and half-way across to the umbilicus. There is a little general soreness upon pressure over the region of the spleen. The urine has been examined, and, while it is high-colored, it does not contain either bile or albumen. The tongue is clean, moist, and not coated as in the preceding case. Bowels are rather loose now, but were not so upon admission into the hospital. He has no cough. He, too, is anæmic-looking, although not to the degree of the other case. His conjunctiva is clear. He had been taking sixteen grains of quinine daily, which were reduced to ten grains on the 10th, and, as he has noises in his ears,

we will now reduce it to six grains daily. He is also taking Basham's mixture.

What will especially interest you in this case of malarial cachexia and enlarged spleen is that he has marked leucocythæmia. An examination of his blood showed a decided increase in the relative proportion of the white cells: from thirteen to seventeen appeared in each field. So that you have here an illustration of leucocythæmia with malarial cachexia, as you also have one of pure anæmia with malarial cachexia, moderately enlarged spleen and liver, and slight jaundice.

What makes the second case more interesting is that there is an actual decrease of the red blood-cells by about one-third, not only an excess of the white but a decrease of the red. This is his first attack. It is remarkable that such changes should take place in the spleen and blood in the short time that he mentions: probably he had been the subject of chronic poisoning from living in a malarial district, but the disease did not manifest itself openly until the time he stated, when he found himself unable to continue his work.

THE PATHOLOGY OF BRONCHO-PNEUMONIA.

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I SHALL offer for your consideration, this evening, some observations on the subject of broncho-pneumonia. I venture to do this for the reason that I believe that this particular lesion suffers from the effects of tradition, from having been called catarrhal pneumonia, and from its relations to pulmonary phthisis. It is also doubtful whether the profession appreciate what a common lesion it is.

I do not mean that the real lesions and symptoms of the disease have not been described. They have been described by different observers; but their descriptions have been, for the most part, fragmentary, and have failed to give a picture of the disease.

The current notions concerning the disease have remained somewhat obscure and indefinite. The prevailing ideas concerning broncho-pneumonia may be stated as follows:

That the terms broncho-pneumonia, lobular pneumonia, catarrhal pneumonia, and capillary bronchitis may all be used to designate the same lesion; although it is customary to use the words broncho-pneumonia and lobular pneumonia when the disease occurs in children, capillary bronchitis when it occurs in adults, and catarrhal pneumonia when it is believed to be a form of phthisis.

That the inflammation begins in the bronchi, extends to the small and capillary tubes, and then to the groups of air-vesicles which belong to these bronchi, and that for this reason the hepatization assumes a lobular form.

That obstruction of the bronchi with inflammatory products frequently produces areas of atelectasis.

That the catarrh may become chronic, the products of inflammation in the air-vesicles undergo cheesy degeneration, interstitial changes be developed in the framework of the lung, and so a form of pulmonary phthisis be produced.

This, I think, is a fair enough example of the ordinary accounts of broncho-pneumonia,—accounts which fail to bring out the essential features of the disease.

Let us, then, turn to the conditions themselves,—to the clinical symptoms and the lesions of broncho-pneumonia, as we all can see them for ourselves.

To approach the subject properly, we must consider the symptoms and lesions of acute bronchitis, as well as those of broncho-pneumonia.

First, then, of *acute catarrhal bronchitis*. This is a disease of very common occurrence, especially in children, but one which seldom proves fatal. Our knowledge of its lesions is derived from exceptionally severe cases, from cases which are complicated by other diseases, and from the symptoms which we observe during life.

The inflammation involves regularly the trachea and the larger bronchi; less frequently the smaller bronchi also. As a rule, the bronchi in both lungs are equally affected.

The first change seems to consist in a congestion and swelling of the mucous membrane of the bronchi, with an arrest of the functions of their mucous glands. This is attended with pain over the chest,

a feeling of oppression, rapid or asthmatic breathing, and a dry cough.

Fever and prostration are present in a degree corresponding to the extent and severity of the inflammation, and to the age of the patient.

After this the mucous glands resume their functions with increased activity, the congestion and swelling diminish, there is a more rapid desquamation of the superficial epithelial cells, an increased growth of the deeper epithelial cells, and a moderate emigration of white blood-cells. Sometimes the red blood-cells also escape from the vessels.

The patient now has less pain and oppression, the cough is accompanied with an expectoration of mucus mixed with epithelium, pus, and sometimes blood. After death, the only lesions visible are the increased quantity of mucus, the growth of new epithelium, a few pus-cells infiltrating the stroma of the mucous membrane, and sometimes a general congestion. If the smaller bronchi are involved, they contain pus-cells.

In a moderate number of cases, especially in very young children, certain accessory lesions are added. There may be a general congestion of the parenchyma of the lung, and even a filling of some of the air-vesicles with inflammatory products. Still further, the filling of the small bronchi may lead to the collapse of the groups of air-vesicles to which they lead, and thus are produced areas of atelectasis, which may be further changed by inflammatory processes.

In acute catarrhal bronchitis, then, the inflammation involves regularly only the mucous membrane of the bronchi; and in this mucous membrane the only changes are congestion, swelling, changes in the epithelial cells, and in the functions of the mucous glands.

As complicating conditions, we may find atelectasis, congestion of the parenchyma, and areas of diffuse pneumonia.

Now let us consider the lesions and symptoms of broncho-pneumonia.

This disease is of common occurrence in children as an idiopathic inflammation, and as a complication of measles, whooping-cough, scarlet fever, and diphtheria. In adults it occurs less frequently; but in them, also, it may be idiopathic, may complicate the infectious diseases, and may follow injuries of the brain and spinal cord. Constitutional syphilis, also, may give rise to broncho-pneumonia, and in pulmonary phthisis this same inflammation constitutes an important part of the lesions.

In children, while the inflammation always presents the same essential characters, yet there is considerable diversity, both in the symptoms and in the lesions, in different cases. Thus, in infants a few weeks old, often the only symptoms are rapid breathing, a febrile movement, prostration, and death.

In older children there are well-marked constitutional disturbances,—fever, prostration, and cerebral symptoms, in some cases the cerebral symptoms being excessively developed. The breathing is rapid. There may be cough. The physical signs are those of bronchitis alone, or of bronchitis with consolidation of the lung. If there is consolidation, it is developed slowly and disappears slowly. Not infrequently successive portions of the lung become consolidated. The disease terminates in the death of the patient, in recovery, or it assumes a chronic character. This disposition of the broncho-pneumonia to become chronic is one of its characteristic features, a feature in which it differs from acute bronchitis and lobar pneumonia. The cases vary, however, as to the degree in which the disposition is carried out.

In some children, the disease, after running its regular course of one or two weeks, subsides: the constitutional symptoms are less marked; the child seems better in every way. But yet the physical signs of consolidation continue; there is still a slight rise of temperature, and convalescence does not fairly begin. In this condition the child may remain for a number of weeks, and then get entirely well, except that the percussion-note and the breathing remain somewhat changed.

In many such cases as these the recovery is permanent, and the child has no further trouble. But in other cases, after the lapse of several months, the child is attacked with acute general tuberculosis. Thus, it is not uncommon, in children's asylums, for an epidemic of measles complicated with broncho-pneumonia to be followed, after the lapse of a year, by an epidemic of acute tuberculosis.

In other children the course of the disease is more protracted. The physical

signs of consolidation continue; there is a febrile movement; the child has no appetite, it gradually emaciates, and dies at the end of several months. These cases resemble pulmonary phthisis in their symptoms, but they are really only examples of a broncho-pneumonia which has become chronic.

In still other children the physical signs and the constitutional disturbances continue, but the child does not succumb to the disease. It continues to live with the evidences of a chronic bronchitis, which go on year after year. So the child may grow up to adult life, sometimes better, sometimes worse, never entirely well. Cough, expectoration, dyspnœa, occasional fever, harass the patient at intervals. The lung becomes more and more solid, the bronchi more dilated, the pleura thicker, and the affected side of the chest more retracted.

In the cases of acute broncho-pneumonia which die within from two days to three weeks there is some variety in *the post-mortem appearances*.

The lungs may be large and well aërated, but on section the cut ends of the medium-sized and smaller bronchi are unusually prominent and thick, and around them are little zones of hepatization of red, or gray, or white color. This appearance of the lung may be further modified by a cylindrical dilatation of the thickened bronchi.

In other cases the lungs are denser and more congested, and a larger or smaller portion of them is consolidated. The consolidation portions are unaërated, dense, and smooth, of red color, or pinkish-gray, or dark red. Or the color may be mottled,—small, rounded gray or whitish areas surrounded by red hepatization.

The distribution and extent of the consolidation also vary. The hepatized areas may be small, encircle the bronchi, and situated at some distance from each other. Or they may, in some one lobe or part of a lobe, be close together, and between them is a more diffuse hepatization, so that this part of the lung may be completely solid.

The appearance of the consolidated lung may be further changed by a cylindrical dilatation of the bronchi.

In still other cases the consolidated portions of lung are of some size and of somewhat regular shape, as if they were portions of lung corresponding to bronchi. These portions are dense, unaërated, of dark-red color, and somewhat shrunken.

If the inflammation has become chronic, then over one lobe or part of a lobe the pleura is thickened, bands of fibrous tissue run into the substance of the lung, and the lung-tissue is dense, hard, and unaërated.

When we examine these lungs more minutely, we notice first some peculiarities which belong to them because they are the lungs of children and not of adults. The bronchi and the connective-tissue framework of the lungs occupy a larger relative space than they do in the lungs of adults, and in any inflammation of the lungs they are apt to take a more prominent share. The air-vesicles are small, and products of inflammation which have been formed within them are absorbed slowly and with difficulty. The walls of the vesicles are lined with a nearly continuous layer of epithelial cells. When the vesicles are inflamed, there is a greater production of new epithelium and a less of fibrin than in adult lungs. The small size of the air-vesicles renders a simple congestion and dilatation of the capillary vessels within their walls a more serious condition than it is in adults. The bronchial glands are more regularly and intensely inflamed. These peculiarities of the child's lung seem to account for its liability to certain forms of inflammation.

The same exciting causes apparently produce in a child under five years of age broncho-pneumonia; in a person between the age of five and fifteen, broncho-pneumonia, or lobar pneumonia; in an adult, lobar pneumonia.

Now let us consider more in detail the lesions of broncho-pneumonia in children.

The trachea and large bronchi are congested and coated with mucus, as in acute bronchitis; but in the smaller, and to a less extent in the capillary, bronchi, the changes are of a different character. In these small bronchi the entire thickness of their walls is infiltrated with cells,—partly new connective-tissue cells, partly pus cells. This change may affect the small bronchi equally in all parts of the lungs, or it may be confined to those situated in one lobe or part of a lobe.

Around every bronchus, of which the walls are infiltrated with cells in this way, is a zone, either of intense congestion or

of pneumonia, the inflammation extending directly outwards from the bronchus to the surrounding vesicles.

In the zones of peri-bronchitic pneumonia, the walls of the air-vesicles are infiltrated with cells in the same way as are those of the bronchi. The cavities of the vesicles are filled with pus and epithelium, or with an organized tissue composed of a basement-substance and cells.

These constitute the essential features of the lesion,—a bronchitis which involves the *walls* of the bronchi, and a pneumonia which involves the vesicles *surrounding* the bronchi, and which produces changes in the *walls* of the vesicles as well as in their cavities, while the inflammatory products within the cavities of the vesicles are not only pus and fibrin, but also organized tissue.

To these essential lesions are often added other accessory changes. The bronchi, of which the walls are infiltrated with cells, may be dilated. Between the zones of peri-bronchitic pneumonia the lung is congested, and there may be areas of diffuse red hepatization, which do not, however, correspond to bronchi. There is often a layer of fibrin on the pulmonary pleura. There may be areas of atelectasis corresponding to obstructed bronchi.

The bronchial glands are swollen, and the seat either of simple or of tubercular inflammation.

When the broncho-pneumonia passes into the chronic condition, the inflammation usually persists only in part of a lobe, or a single lobe, while the rest of the lungs return to a normal condition. In that portion of the lung in which the inflammation persists we find the small bronchi with their thickened walls and their zones of peri-bronchitic pneumonia. The number of bronchi involved may be moderate, and then a section of the lung will look as if it were studded with fibrous nodules. Or most of the bronchi may be involved, the zones of peri-bronchitic pneumonia are close together, and the entire lung-tissue is dense and solid. In either case the bronchi may be dilated and the pulmonary pleura thickened. As the inflammation goes on, its interstitial character becomes more and more marked, until the affected portion of lung becomes converted into a mass of fibrous tissue, in which the bronchi still remain, while the air-vesicles are obliterated. The blood-vessels, however, are for the most part not obliterated, so that the lung does not become necrotic or degenerated. Still, occasionally, areas of cheesy degeneration exist.

These are the characteristic features, then, of the broncho-pneumonia of children.

In adults, broncho-pneumonia occurs in one of four forms: as an idiopathic inflammation of acute and severe type; as a subacute inflammation; as a complication of the infectious diseases and of lesions of the brain and spinal cord; as one of the lesions of phthisis.

1. The acute, idiopathic broncho-pneumonia of adults.

The invasion of this disease is acute and severe.

The patients have rigors, pains in the head, back, and chest, vomiting, and marked prostration. The temperature runs between 102 and 105; the pulse is rapid; the breathing is rapid and unsatisfactory. There is cough, at first dry, later accompanied by profuse muco-purulent and bloody expectoration. There is venous congestion of the skin, albumen in the urine, and cerebral symptoms. When we examine the chest, we find the percussion-note normal, or exaggerated, or dull. There are crepitant, sub-crepitant, and coarse râles, with sibilant and sonorous breathing.

The cases usually terminate fatally in about seven days. After death we find both lungs large, heavy, and congested. There is fibrin on the pulmonary pleura. The trachea and large bronchi are congested and coated with mucus. The smaller bronchi contain pus, their walls are thickened and infiltrated with cells, and around them are zones of air-vesicles, with their blood-vessels gorged with blood, and in their cavities epithelium, pus, and fibrin.

2. *The subacute broncho-pneumonia of adults.*—This is a rare disease; it has a clinical history much resembling that of acute phthisis.

The patients are attacked with prostration, fever, cough and muco-purulent expectoration, dyspnœa, pain in the chest, coarse râles all over the chest, with dulness over the consolidated portion of the lung. These symptoms continue, the patients lose flesh and strength, and die at the end of several weeks.

After death we find fibrin on the pulmonary pleura. The larger bronchi are congested and coated with mucus. There is an irregular, diffuse, red hepatization, mottled with small white nodules, from the size of a pin's head to that of a pea. In the diffuse red hepatization the air-vesicles are filled with pus, epithelium, and fibrin. The white nodules correspond to sections of bronchi with zones of peri-bronchitic pneumonia. These bronchi are of small size, they contain pus, their walls are thickened and infiltrated with cells, and they may be dilated.

In the peri-bronchitic zones of pneumonia the walls of the vesicles are thickened and infiltrated with cells, but the blood-vessels remain pervious and can be injected. The cavities of the vesicles are filled not with pus and fibrin alone, but also with a basement-substance of homogeneous or finely-fibrillated character, in which are embedded polygonal, round, and fusiform cells.

3. *The complicating broncho-pneumonia of adults.*—It is not uncommon for some of the infectious diseases and some of the lesions of the brain and spinal cord to be accompanied by the development of this form of inflammation of the lung.

In typhoid fever we sometimes find a broncho-pneumonia exactly resembling the same lesion as it ordinarily occurs in children.

In pyæmia the inflammation is of the same kind, but is apt to be less extensive, involving only part of one or both lungs.

With lesions of the brain and spinal cord the changes are the same as with pyæmia.

4. *With phthisis*, both acute and chronic, broncho-pneumonia often forms an important part of the morbid changes in the lungs, but yet it is never the primary or the only lesion. It is only one of a number of pathological changes which go to make up the complex whole of pulmonary phthisis.

From what has been said, then, I would draw the following conclusions:

There is a form of inflammation of the lung which may properly be called broncho-pneumonia.

In children it is the most frequent form of pneumonia, in adults it is less common.

It differs from bronchitis and from lobar pneumonia in that the inflammation effects changes in the *walls* of the bronchi and of the air-vesicles, and this peculiar interstitial character of the process exists from the very outset.

The inflammation extends from the bronchi not to the group of air-vesicles into which they lead, but directly outwards to the vesicles which surround the inflamed bronchi, and in these vesicles the walls are changed.

The interstitial character of the inflammation is its most important feature. It accounts for the severity of the symptoms, the frequent long continuance of the consolidation, the dilatation of the bronchi, and for the tendency of the broncho-pneumonia to assume a chronic character.

The complicating tubercular inflammation of the bronchial glands may give rise later to general tuberculosis.

Broncho-pneumonia is not a form of phthisis; it is doubtful if it is ever directly followed by phthisis; but it constitutes a part, and often an important one, of the lesions which constitute phthisis.

I have endeavored to describe in a somewhat incomplete way the characteristic symptoms and lesions of an ordinary disease. I am well aware that I have described conditions which are familiar, and that nothing which I have said has not been said before.

But the very common occurrence of this form of inflammation of the lung renders it all the more important. The varying character of the lesions has confused their essential and their accidental characters, and I think it is worthy of consideration whether the views which I have advanced concerning the pathology of the disease are not the true ones,—namely, that the inflammation is essentially and from the outset an interstitial one, more or less complicated by other conditions.

A NOTE ON KAIRIN.

BY JAMES H. HUTCHINSON, M.D.,

One of the Attending Physicians to the Pennsylvania Hospital.

ALTHOUGH more than a year has elapsed since Filehne called the attention of the profession to the remarkable antipyretic properties of kairin, and although his observations have been fully confirmed by many physicians in Germany, the drug seems to have been resorted to but rarely in this country. In-

deed, I am not aware that previous to my own experiments any trials of its efficacy in the treatment of hyperpyrexia had been made in this city. Kairin was originally made known to us through the experiments of Fischer and Königs, and is one of a series of artificial alkaloids derived from chinolin by the addition of oxygen, hydrogen, and carbonic acid. It occurs in a yellowish-white crystalline powder, of a somewhat pungent bitter taste, which is excessively disagreeable to most patients. Given in doses of from one to one and a half grammes to healthy adults, it has no physiological action and no effect upon the temperature. It also does not produce any unpleasant effects, such as headache, ringing in the ears, or sickness. When, on the other hand, it is administered in hourly doses of half a gramme, in febrile conditions, with the temperature ranging between 103° and 105° F., the temperature is usually reduced in two hours from three to five degrees, and not infrequently falls to normal. The defervescence is generally accompanied by profuse perspiration, which usually continues until the temperature ceases to fall, by shivering, and by a greenish discoloration of the urine. If administered in larger doses (from a gramme and a half to three grammes and a half), it often produces grave symptoms, such as cyanosis, apathy, and subnormal temperature, which necessitate the prompt use of stimulants. Occasionally collapse is produced by it, resembling, it is said by Drs. Freymuth and Polchen, that of cholera Asiatica, but differing from the latter in the sense of vigor felt by the patient, who invariably recovers. Filehne says the temperature is often reduced to 94.6° F. by doses as small as the eighth of a gramme in patients of a slender build or who are emaciated or suffering from hectic fever.

Guttmann has given kairin in cases of pneumonia, measles, phthisis, typhoid fever, scarlatina, pleurisy, peritonitis, erysipelas, ague, septicæmia, and apparently always with advantage. On the other hand, Dr. H. Menche's (of Rheydt) experience with it in the pyrexial stages of pneumonia, pleurisy, and pernicious anæmia was unfavorable, which has been attributed by others to the use of large doses. In rheumatism, he found that its use was followed by diminution of the pain, but not by any reduction in the swelling of the joints. Freymuth and Polchen have prescribed it in relapsing fever, with the following results: When given from the fourteenth day after the first attack of relapsing fever, the second attack occurred as usual, but in a very modified form, with a rigor but no elevation of temperature, and with spirilla in such small numbers that the nature of the attack was barely recognizable. This continued for twenty-five hours, when the kairin was omitted. Two hours afterwards a classical relapse occurred, with a temperature of 104.9° F., and spirilla in abundance.

The first case in which I was induced to try kairin was one of typhoid fever of more than ordinary severity.

The patient, a robust young Irishman, was admitted to the Pennsylvania Hospital in the second week of the disease, and was treated in the usual way for the first week. On the ninth day after his admission, observing that there was little, if any, morning remission, and that the temperature was 103° F., I determined to make trial of the new drug. A dose of eight grains was accordingly given at 1 P.M. on May 5. An hour later, no effect having been produced, a second dose of the same amount was administered. At 3 P.M. the temperature was found to have been reduced to 101° F. At 5 P.M., as the thermometer showed that the temperature had risen again to 103°, a third dose of a like amount was prescribed, with the result of a fall of temperature within an hour to 101⅘° F. At 8 P.M. the temperature had again risen to 103°, and a fourth dose was accordingly administered, and the temperature again reduced one and a half degrees. The exhibition of the drug was followed by depression, by profuse sweating, and, after the last dose, by some muscular tremor. The depression of temperature was temporary, lasting only about an hour. Kairin was not administered again until the fourteenth day after admission, when it reduced the temperature in an hour from 102.5° to 100°. In the mean time, the fever had ceased to be continuous, the morning remissions being as marked as they usually are in the third week of typhoid fever.

In one other case of typhoid fever I gave kairin with as marked results as those just detailed, and it also reduced the temperature very considerably in a case of

malarial fever; but in this latter case I did not like to push it as in the other cases, on account of the extreme debility of the patient.

By the kindness of Dr. J. Howard Reeves, lately resident physician to the Pennsylvania Hospital, I am permitted to refer to a case of sunstroke to which he gave kairin. The patient, who had a temperature of 105°, was conscious, but almost delirious with pain in his head. A cold bath was given to him immediately after his admission to the Pennsylvania Hospital, which reduced the temperature a few degrees. It rose again soon after, and the skin became as dry and burning as before. Eight grains of kairin were then given to him. In an hour his temperature had fallen two degrees, and he was covered with a profuse perspiration. The temperature after this steadily fell, and in three hours had reached the normal.

Observing that profuse perspiration was one of the consequences of its administration in the above cases, it occurred to me that kairin might possess valuable properties as a diaphoretic. With this end in view, I gave it in eight-grain doses to a patient with general anasarca dependent upon disease of the kidney. No sweating followed its use,—a result which was probably due to the fact that the patient was free from fever. It will be remembered that in my opening remarks it is expressly stated that no sweating is produced by its administration in health.

The cases which I have just reported have convinced me that kairin possesses the power of reducing the temperature of the body in fever to an unusual degree, and that it does this with certainty and promptitude, and, it may be added, when moderate doses are used, with safety. One care, however, it is necessary to exercise in its administration, and that is to use fresh specimens of the drug only, as it undergoes change if kept for any length of time. It reduces the temperature much more rapidly than quinia, although the apyrexia produced by it is of much shorter duration than that caused by the latter. It is also capable of depressing the temperature during the evening exacerbations of fever, while the most marked results are obtained, on the other hand, from quinia just before the morning's remission. Its use is also free from some of the objections usually urged against the latter, as it does not give rise to unpleasant effects, such as headache, ringing in the ears, and the like. Although less rapid in its action than the cold bath, it is obvious that it may be administered in many cases in which a resort to the latter would be impossible. The excitement and terror which are often occasioned by the use of the bath, even when it is brought to the bedside of the patient, constitute a positive objection to it, which, to my mind, becomes insuperable in cases in which it is necessary to carry him some distance to a bath-room. It is said to exert a marked and favorable influence over the brain-symptoms which occur in fevers, possessing, in this respect, an undeniable advantage over several of the other antipyretics.

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REPORT ON MEDICAL AND SURGICAL ELECTRICITY.

BY WM. R. D. BLACKWOOD, M.D.

GALVANISM.

DR. MAX BUCH has called attention to the fact that galvanic irritation of a living muscle always produces an increase of temperature, and has, in this connection, proposed to apply electricity to determine the truth in cases where death is not certain. Although muscular contraction can be produced for a short time after death in certain portions of the body (the deltoid, or quadriceps femoris), no elevation of the temperature occurs after five hours, and he therefore proposes the conjoined application of a delicate surface-thermometer, with the current from, say, five cells. When the mercury has remained stationary for some minutes after applying the thermometer the current is turned on, and at once the column rises in the tube if the muscle is alive, but if death has occurred the temperature remains unaltered. The method may, at rare times, be of value, but other very good indications of death are within reach of practitioners of ordinary skill.

Gibney reiterates, in the *New York Medical Record*, the advantage of the *strong* galvanic current in obstinate sciatica. He applies the positive pole over the nerve at its point of exit at the sacro-sciatic notch, and the negative is placed just above the popliteal space, or, preferably, over the area of greatest pain. The

current is run up to its maximum bearable force and kept there. Referred sensations (paræsthesia) will now be felt throughout the distribution of the nerve. The pain is never so bad from the current as from the neuralgia, and relief is usual from the first. Great care must be observed in precision of application. Cases are given in illustration, and we know, from experience, the value of Dr. Gibney's method; and our own observation agrees with his in several obstinate cases, where every other method of treatment failed.

The galvano-cautery has been lauded by Frolich, of Berlin, in follicular catarrh and trachoma. The reaction is stated to be slight, even when extensive granulations have thus been destroyed.

The cautery has also been quite successfully employed in lupus by Bernier (*Paris Médical*), and Shoemaker, of our own city. One great advantage over jequirity and ordinary caustics is the almost entire absence of acute pain, and another is the decreased probability of auto-inoculation. The incisions usually made by the bistoury have, without doubt, been the means of extending the disease, when carelessly made. It is asserted that the latter procedure has, before now, been the cause of lighting up internal tuberculosis, true lupus being, according to Cornil, a tuberculous disorder of the skin. This theory has received support from good authority at late medical conventions, and if the cautery can compete with older methods of destroying the local affection, which is reasonably certain, the advance in therapeutics is an important one.

The troublesome senile hypertrophy of the prostate is, according to Bredert (*Berlin. Klin. Woch.*), rapidly reduced by electrolysis, the cathode being applied to the gland by insulated needles. Five cases are reported as thus cured, but the account given does not state whether the reaction developed any inflammatory sequelæ. In our own cases, where the ordinary current has been applied *without puncture*, we have repeatedly had to combat considerable irritation of the bladder, though, curiously enough, galvanism has, at times, relieved cystitis promptly which arose from other causes.

GALVANO-PUNCTURE IN ANEURISM OF THE AORTA.

Dr. Francesco Brancaccio reports the case of a man, intemperate, 64, who, on examination, showed a tumor limited above by the upper border of the second rib, on the right by the sternum, on the left by the mammary line, and which was continuous below with the heart. The diagnosis was aneurism of the ascending aorta, and galvano-puncture was practised. Two needles were inserted in the third interspace to a depth of one inch and a fifth, and one inch and a half apart. Fifteen Daniell cells were used (seventeen volts). The first sitting lasted sixteen minutes. The patient was better the same afternoon; the pulse fell from 118 to 90, was stronger, and the tremor was smaller; the respiration was freer and less frequent. Twenty cells were used for fourteen minutes twenty days afterwards, and four applications made the cure complete.

Hydrarthrosis of the knee has been repeatedly relieved by galvanism, and a case is reported by Dr. Castaneo, of Buenos Ayres (*Revue Médicale*), in which a cure was promptly effected after blisters, cautery, and other radical measures failed. Many instances are now on record evidencing the rapid absorption of pleuritic effusions under galvanism, and others of abdominal character (not encysted); hence the success might logically be looked for in any joint-effusion where the integrity of the articulation had not been destroyed.

Silva-Aranjo and Moncorvo communicated their first note on the treatment of elephantiasis by electricity to the Academy of Sciences of Paris in 1880, and to the Academy of Medicine in 1881. More than a century ago Henley treated a case successfully (*Alard, De l'Inflammation des Vaisseaux Absorbans* (*sic*) *Lymphatiques, Dermoides et Souscutanés*, Paris, 1824, p. 589). When Silva-Aranjo first applied electricity to elephantiasis of the scrotum, in 1879, he neither knew of this case nor of those of Beard and Rockwell (Tibbits's "Hand-Book of Medical and Surgical Electricity," London, 1877). The authors employ from forty to sixty Trouvé elements, the negative to different affected points, and the positive on the sound skin near by. They sometimes use faradic currents in conjunction, but their reasons for doing so are not apparent. The duration of each application is from fifteen to thirty minutes, and in severe cases electro-puncture with needles is resorted to.

Trials have also been successful in the service of Professor Oliveira Ferjaô, of Lisbon, and are in progress at Vienna, in the division of Professor Kaposi, by Riehl. Their conclusion is that, if not infallible, electricity is certainly the best agent in our hands at present for treatment of this formidable disease. We have no account of the treatment by electricity in this country aside from those already noted, but the frequency of the disease would certainly afford wider experiment than has heretofore been reported.

FARADISM.

The induced current has been used in pleural effusions of varied kind and degree, as reported by a number of Continental authors, and their results agree with our own, so far as hastened absorption of serum was concerned in later stages of acute pleurisy.

In obtaining condensation of the uterus where involution has not progressed satisfactorily after labor, the faradic current is highly recommended by several reporters. Some ten years ago we gave the detailed history of a number of cases of subinvolution treated entirely by electricity, and we are glad now to notice, at last, one of our critics as having been converted after his plainly-expressed disbelief. We have had excellent results always in such cases, and also in hypertrophy of the organ from many other causes, notably from submucous fibroids. Recently a lady who declined surgical measures has parted with her fibroids (two in number) under careful faradization, and this without taking ergot or any other drug.

The ordinary faradic coil as usually wound with a single secondary of a uniform gauge of very fine wire will not answer for treatment of deep-seated visceral organs. An arrangement of multiplex coils of varying specific resistance wire and different area in cross-section of both wire and spool is necessary, as described in another place.* The number of binding-posts in ordinary faradic batteries is no criterion of their value, the secondary being merely looped out at points and connected to these posts. Intensity in such cases is just as well governed by the draw-tube, and accidents from short circuiting in poorly-covered wire are liable in this plan of construction.

Obstinate hiccough is reported as cured by faradism, but the current has failed in our hands, although faithfully tried, in a hospital case, which gave way at last to monobromide of camphor, cannabis Indica, and sumbul.

In psoriasis, acne, and prurigo, faradic currents have been reported, within the past three months, as successful in many cases, some of them inveterate in their severity.

STATIC ELECTRICITY.

In the *Progrès Médical* we find, incident to the phenomena of static electricity, the case of a young woman suffering from ovarian hyperæsthesia and hysteria, who possesses increased bodily electricity. Brushing her hair produces crepitation and sparks, light substances cling to her finger-ends, and dry clothing wraps her limbs so tightly as to impede voluntary movements. The intensity of the phenomenon coincides with her feelings: when highly charged she is well and sprightly; when not, she is dull and depressed. Damp weather disagrees with her, as it does with the static machine, and after repeated discharges she feels exhausted. These phenomena cannot be averted by the wearing of silk underclothing, as might be expected, but the application of the "electric wind" is at once efficacious in restoring her spirits, no matter how much depressed she may at the time be. Our plan of applying the "wind" or "bath" is to insulate the patient, connect the stool with the *outside* of one jar by chain, and then, through a ball rheophore connected with the *outside* of the other condenser, make a thorough "general" application. The jars must be disconnected, and the "brush" made as long as possible, to obtain the peculiar refreshing effect.

Vigoroux contributes to the same journal an article on the prevention of cholera by the use of static electricity. He refers to experiments of Boillot, Angus Smith, and Chapuis, which prove the great disinfecting power of ozone, as produced by the static machine, and the stimulus to nutrition by the electric bath (insulation on platform). He believes that daily baths are the best prophylactics against cholera; but the unreliability of tne machines, as generally made, militates against their use

* "The Causes and Treatment of Constipation," Philadelphia Medical Times, July 28, 1883, and Proceedings of the Philadelphia County Medical Society, vol. v. p. 173.

extensively, even if the theory were correct,—which we doubt.

The Toepler-Holtz of James W. Queen & Co., of this city, is the only static-electric machine in our experience which is *uniformly* reliable in all weathers, but it requires care to keep it so in humid summer months if not encased in an air-tight cover. Properly covered and kept *free from dust*, it will work satisfactorily at any time.

EXPERT AND NON-EXPERT EVIDENCE.

BY HENRY A. RILEY, ESQ.,

New York City.

ONE of the most vexed questions in medico-legal matters is the proper weight to be given to expert evidence, and in what respects it is better than non-expert evidence. A short time since there were several articles in one of the leading reviews on this subject, and one or two of the writers took the ground that, on the whole, expert medical evidence was unreliable. This is not the general view, however; and, with proper restrictions, there is no doubt that expert evidence is of as much value as any that can be produced in the trial of a case. There is a great deal of doubt whether the production of expert witnesses by one side or the other to sustain its own case is not a vicious privilege, and the cause of much of the dissatisfaction felt by the public with the whole system. It certainly does not add to the popular respect to see several distinguished physicians testify on a trial that a person is insane, and then to see them followed by several other equally distinguished physicians, who testify to exactly the opposite.

The only remedy, apparently, for this state of affairs is to have the experts called by the court, instead of by a particular side to bolster up its own case. In this way the physician is really independent, and is not rendered partial by the knowledge that his compensation depends upon his taking the view certain lawyers desire.

The courts will, however, admit non-expert testimony, under certain conditions, in cases where it is generally supposed that only professional persons can give reliable opinions. Even in cases where the insanity of a person is in question, such non-expert testimony may be produced. The proper limits of such testimony were settled in a recent case in the United States Supreme Court, where Justice Harlan gave the following interesting opinion: "Counsel for the plaintiff in error contends that witnesses who are not experts in medical science may not, under any circumstances, express their judgment as to the sane or insane state of a person's mind. This position, it must be conceded, finds support in some adjudged cases, as well as in some elementary treatises on evidence. But in our opinion it cannot be sustained, consistently with the weight of authority, nor without closing an important avenue of truth in many, if not every, case, civil and criminal, which involves the question of insanity. Whether an individual is insane, is not always best solved by abstruse metaphysical speculations, expressed in the technical language of medical science. The common sense, and, we may add, the natural instincts, of mankind, reject the supposition that only experts can approximate certainty upon such a subject. There are matters of which all men have more or less knowledge, according to their mental capacity and habits of observation,—matters about which they may and do form opinions sufficiently satisfactory to constitute the basis of action. While the mere opinion of a non-professional witness, predicated upon facts detailed by others, is incompetent as evidence upon an issue of insanity, his judgment based upon personal knowledge of the circumstances involved in such an inquiry certainly is of value, because the natural and ordinary operations of the human intellect, and the appearance and conduct of insane persons, as contrasted with the appearance and conduct of persons of sound mind, are more or less understood and recognized by every one of ordinary intelligence who comes in contact with his species. The extent to which such opinions should influence or control the judgment of the court or jury must depend upon the intelligence of the witness, as manifested by his examination, and upon his opportunities to ascertain all the circumstances that should properly affect any conclusion reached. It will also depend in part upon the degree of the mental unsoundness of the person whose condition is the subject of inquiry; for his derangement may be so total and palpable that but slight observation is

necessary to enable persons of ordinary understanding to form a reasonably accurate judgment as to his sanity or insanity. In other cases the symptoms may be of such an occult character as to require the closest scrutiny and the highest skill to detect the existence of insanity."

TRANSLATIONS.

SUCCESSFUL EXTIRPATION OF THE SPLEEN.—At a recent meeting of the Society of Physicians in Vienna, Dr. V. Hecker, assistant to Professor Billroth, reported the following case. A woman, æt. 43, had, ten years previously, begun to experience pain in the left side of the abdominal region. After a lapse of three years a tumor appeared, which within the last two years had grown rapidly. The increase had been more rapid a few weeks before than at the time of the operation. It had recently become movable. In the dorsal position there was a decided projection, and a tumor the size of a child's head was felt. This tumor could be pushed to the left and turned on its axis. Its inferior and superior borders presented sharp angles. Intestinal accumulations were caused by the tumor. The liver was small. The operation showed the tumor to be a lymphosarcoma which had grown from the spleen. The connections with the mesentery and intestine were separated partly by tearing, partly with the knife, numerous ligatures being required. On account of adhesions with the pancreas, it was necessary to leave a part behind. The course of the case had been thus far favorable, and it is hoped a cure will follow.

So far, there are known to have been thirty-six cases of extirpation of the spleen: of these, twenty-one on account of leukæmia. Of the last, but one recovered.—*Wiener Med. Wochenschrift.* X.

CONCERNING THE BEHAVIOR OF VARICOSITIES OF THE PREGNANT AFTER THE DEATH OF THE FŒTUS.—Dr. Gustave Rivet reports this case in the *Progrès Médical*, xi.: A cook, æt. 33, of good constitution, had already gone through two pregnancies, the last being an abortion at the fifth month. She complained during both her first and second pregnancies of great varicosity of the lower extremities. In the third pregnancy it again appeared during the first months. It was well developed; hard, compact cords were seen situated in the region of the ankle-joints, also on the inner surface of the left thigh. These were associated with œdema and a decided tenderness. The movements of the child suddenly ceased, the breasts became painful, and yielded some milk-drops upon pressure; the circumference of the abdomen decreased, and from that moment the varicosities began to lose in fulness and size. A few weeks later the patient gave birth to a female child, very much macerated.

The interesting facts in this case are, on the one hand, the relatively long time in which the dead fœtus remained in utero; on the other, that from the moment the death of the fœtus was known to have occurred, the varicosities began rapidly to disappear. Hence the decision is arrived at that the uterine circulation stands in a close connection with the venous, and, when it is diminished, the stasis in the veins below is reduced. X.

INHALATIONS IN PHTHISIS.—From experiments with inhalations in phthisis, Dr. Renzi (*Rivista clinica e therapeutica*, August, 1884) gives the following general conclusions:

1. Inhalations of iodine and of iodoform with spirits of turpentine (one part to twenty-five, of which a few drops are placed upon a respirator) ameliorate the general nutrition, augment the inspiratory and expiratory pressure, and produce an improvement in the state of the lungs. But the fever, the diarrhœa, and the night-sweats are not modified. The cough and expectoration are especially modified by the iodoform and turpentine.

2. Inhalations of sulphuretted hydrogen and of sulphurous acid resemble each other in their effects: they increase the general strength, improve nutrition, and increase the urinary secretion. Inhalations of sulphuretted hydrogen have a special action upon respiration,—diminution of the number of respiratory movements, which become easy, tranquil, and profound,—and also upon the cough, which diminishes and may disappear. The fever, sweats, and diarrhœa are not modified.

3. Until further information is obtained upon the subject, the author considers the terebinthinate inhalations and those of sulphuretted hydrogen as occupying the first rank.—*Bulletin Gén. de Thérapeutique*, October 15.

CONCERNING A SPECIAL FORM OF NYMPHÆ AND THE INFLUENCE OF THE SAME UPON LABOR.—Paul Budin (*Le Progrès Médical*, xii. 18, 347, 1884) states that in some females the labia minora unite by a prolongation posteriorly instead of terminating about the middle of the vulva. There appears then both a commissure of the labia minora and one of the labia majora. The author found this in many white females, and in one colored. In one case he found a moderately deep furrow between the two commissures. Luschka and Sinety had already described similar cases. The results of this condition are either that the child's head, when passing the vulva, is thrown forward and covered with a caul, the head being retarded by the commissure of the nymphæ, or that a rupture occurs. The latter is usually central. This is contrary to the common course of perineal rupture, in the ordinary condition of things it being usually to one side. One or both of the nymphæ may also in this case be torn loose.

The author proceeds to report at length a case of this kind, in a secundipara æt. 22. In this case the midwife, who was supporting the perineum, reported a rupture. The author examined, but found the perineum intact. A little anterior, however, he found lips of tissue of a blue color, which were hanging forward. On closer examination it was found that the left nymphæ had been torn from their insertion at the clitoris and were hanging loose from the vulva. On account of their posterior connection, the nymphæ in this patient formed a complete ring, constituting an obstacle to the advancing head. This, however, was removed through the rupture of the labia minora from their anterior attachment. Injections of a two-per-cent. solution of carbolic acid were made five or six times a day, and no evil sequel occurred. On the seventh day *post partum* the labia minora came away entirely. On the seventeenth day the genitalia were completely healed. X.

A HAIR TUMOR REMOVED FROM THE STOMACH OF A YOUNG GIRL THROUGH GASTROTOMY (*Arch. für Klin. Chir.*, xxix. S. 609).—In a girl, æt. 15, who since her thirteenth year had been in a kyphotic condition, often complaining of stomach-trouble, there was discovered an abdominal tumor, solid and movable. It was thought to be a floating kidney, and extirpation was attempted. On opening the abdominal cavity, the tumor was found to be within the stomach, which was very pendent. An incision into this organ showed a hair tumor representing the dimensions of the stomach: weight, 281 grammes; length, 13½ centimetres; breadth, 10½ centimetres; thickness, five-sixths centimetre. The color of the hair was black on the surface, on the inner part decidedly blonde. The pieces were from one to two centimetres long. The patient had a favorable recovery from both her abdominal and gastric wounds. She explained, after her recovery, that four years previously she had for the space of one year chewed her hair energetically. The hair of the inner part of the tumor resembled quite closely her own hair. The author thought that the hair on the outer part had been colored black by preparations of iron which he had given her for chlorosis over a long period of time. This case, he said, is not without parallel. He had collected not less than seven analogous cases from the literature. In the majority of cases the chewing of the hair continued much longer, and the tumors were on this account larger. The other patients having hair tumors all died, either from uncontrollable vomiting or perforation. X.

SUDDEN DEATH AFTER INJECTION OF IODINE IN A CASE OF SPINA BIFIDA.—A little girl who had been treated for spina bifida by tapping had the lead compress removed too soon, and the swelling afterwards returned. Dr. Waltering, of Münster, aspirated the tumor, removing two tablespoonfuls of serum, and injected a half-ounce of an iodine solution (iodin. puri, 0.5, potassii iodid., 1.5, aquæ dest., 30) directly into the sac. The child suddenly stopped crying, and stopped breathing also, although the heart for a time continued to beat. The lips were livid, but became slightly better colored under artificial respiration. At the end of thirty minutes the heart had ceased to beat, and efforts at resuscitation were discontinued. The case is reported (*Allg. Med. Central Zeitung*) as a warning against injections of iodine solution into the sac in a case of spina bifida.—*Deutsche Med. Zeitung*, October 16.

PHILADELPHIA
MEDICAL TIMES.
PHILADELPHIA, NOVEMBER 29, 1884.

EDITORIAL.

THE LESIONS OF LOCOMOTOR ATAXIA.

THE restricted view of the pathology of Duchenne's disease which regards it as a malady in which the spinal cord is invariably the site of morbid changes, and that the posterior columns, or, more correctly speaking, the posterior root-zones (columns of Burdach), and the nerve-roots, are chiefly affected, needs to be modified and slightly extended, in the light of some recent observations. Locomotor ataxia and posterior spinal sclerosis can no longer be regarded as convertible terms. A very valuable contribution was brought to the discussion of this question by Charcot (*Leçons sur les Maladies du Système nerveux*) in his classical consideration of some of the anomalies of locomotor ataxia; but quite recently several communications have appeared, which enable us to draw more definite conclusions as to the pathology of this most interesting affection. Dr. Rummo in particular has called attention* to a form in which the motor inco-ordination is entirely missing. In the case reported, the cerebral symptoms were followed, nearly two years afterwards, by neuralgic pains in the lower extremities, while the power of co-ordination of muscular movements remained perfect. Fournier last summer delivered a series of lectures on the Pre-ataxic Period of Tabes, in which he claims that the stage which precedes inco-ordination usually lasts from three to six years, but may be prolonged to thirty. He regards it as a polymorphous affection, of which the *début* may be announced in various ways: by vesical or genital disorders, and often by cerebral symptoms, which he groups under the following heads: (1) vertigo (reflex or essential); (2) various attacks (apoplectic, epileptiform, aphasic); (3) motor disorders; (4) psychic disorders; and (5) general paralysis. Without considering these (which are reviewed more fully in an interesting article, by Scribe, in *La France Médicale*, No. 102), or discussing the cases presented by M. Dejerine last year to the Paris Academy (in which no special lesion existed to account for the symptoms during life, which were found to be due in reality to parenchymatous neuritis of the cutaneous nerves), we will merely state that the conclusion of Messrs. Rummo and Fournier, that "Tabes dorsalis is an affection of the spinal cord, of the brain, and of the peripheral nerves," seems fully warranted by their observations. It would also seem that the term locomotor ataxia should yield to the word "tabes," since the ataxia of movements may be wanting during many years, and even may be entirely absent throughout the whole course of the affection. In a suggestive paper by E. C. Seguin (*Archives of Medicine*, October), some illustrations of this anomalous course of posterior spinal sclerosis are given, and the possibility is intimated of the accidental concurrence of other disorders, such as general paralysis with spinal sclerosis, any dependence between the cerebral and spinal lesion being doubtful. But he also reports a case of the extension of the pre-ataxic stage to the extraordinary period of twenty-nine years, and another in which atrophy of the optic nerve preceded the ataxic symptoms by at least four years.

WE desire to direct especial attention to the gift to the German Hospital of nearly six hundred thousand dollars by John D. Lankenau, Esq., of this city, some account of which will be found on another page.

* Sur un cas non-commun de tabes bulbaire primitif. Medicina Contemporanea, April, 1884, L'Union Médicale, June, and La France Médicale, September, 1884.

AN APPEAL TO CONGRESS.

IF to be forewarned is to be forearmed, we certainly should have nothing to fear from the advent of the cholera, which is billed to appear shortly. Sanitarians, local health boards, and the medical journals, as well as the public press, are for once agreed that the presence of epidemic cholera in this country may be expected within a few months.

The American Public Health Association at its last meeting, and the recent conference of State Boards of Health, gave serious consideration to this subject, and adopted certain valuable recommendations for the prevention of the epidemic, which have been printed in the form of a report and widely circulated. The essential factors to the prevalence of cholera in this country in epidemic form are, first, its importation by ships from infected ports, and especially from India; secondly, local disregard of hygienic principles; and, thirdly, the transportation of the poison by patients in clothing or about their persons in going from place to place while suffering from some stage of the disease. To combat these three factors needs the practical co-operation of international, national, and local health boards.

In view of the threatened introduction of cholera into this country during the coming year and the consequent waste of life and property and derangement of commerce, trade, and productive industries, the conference, besides warning local health boards to increased vigilance, declared that "the general government should maintain such a national health service as shall, by rigid inspection at the port of embarkation, question the freedom from disease and infection of all persons and things from infected districts, and shall secure the surveillance of such persons and things while on shipboard, and, when necessary, detention at quarantine stations on this side for treatment and disinfection." The conference urged upon Congress the establishment of such a service by attaching to the foreign consular service medical officers of health, to be either accredited consuls or attached to the consulates, charged with the execution of the above duty.

It is peculiarly unfortunate that the inspection and quarantine service inaugurated by the National Board of Health is now inoperative for want of appropriation by Congress. It is to be hoped that the members of the next Congress will have their attention so strongly directed to the necessity of prompt action in this matter as to lead them to act upon it early in the session and make the necessary appropriation required to establish an efficient national protective sanitary service.

While local health boards can do very much towards restricting the spread of the disease and reducing its mortality, yet they are almost powerless with regard to preventing its introduction. The National Board of Health must do this work, or it will be left undone.

THE NEW YORK STATE MEDICAL ASSOCIATION.

THE first annual meeting of the New York State Medical Association, which was held at the Murray Hill Hotel, New York, on November 18 and the three following days, demonstrated very conclusively the strength of the revolt from the arbitrary action of the old State Society upon the Code question, three years ago. While many of the members of the new organization might have been in favor of the objects aimed at by the committee in its report, they believed that the step proposed was injudicious and hasty, and calculated to create a division between physicians of New York and those of other portions of the country. That step was taken, and, as had been anticipated, the American Medical Association at St. Paul refused to receive the delegates from the

New York State Society. The establishment of a new State Association and of a second County Medical Society in New York City was almost a natural result of this state of things; and now, looking at the success of the meeting of the new Society, at the value and number of the scientific papers that were read, the well-sustained discussions, and the standing of those who participated, we are almost tempted to rejoice at the division in the profession which stimulated to such activity and brought out such good work. The founders of the new Association deserve to be congratulated upon its success. Owing to pressure of Society reports, we shall not attempt an analysis of the numerous papers read at this session, as we learn that the *New York Medical Journal* has arranged to publish the official report of the proceedings. The list of officers elected for the ensuing year is as follows:

President.—Dr. John P. Gray, of Oneida County.

Vice-Presidents.—Second District, Dr. W. H. Robb, of Montgomery County; Third District, Dr. J. G. Orton, of Broome County; Fourth District, Dr. Joseph O. Greene, of Erie County; Fifth District, Dr. J. C. Hutchinson, of Kings County.

New Members of Council.—First District, Dr. William Gillis, of Franklin County; Second District, Dr. R. C. McEwen, of Saratoga County; Third District, Dr. Frederick Hyde, of Cortland County; Fourth District, Dr. Darwin Colvin, of Wayne County; Fifth District, Dr. J. W. S. Gouley, of New York County.

CARBOLIC ACID IN THE TREATMENT OF INTERMITTENT FEVER.—Dr. Dieulafoy, in a case of obstinate ague which had recurred in spite of large doses of quinine, tried hypodermic injections of phenic acid in one-per-cent. solution, .025 gramme (gr. $\frac{1}{3}$) being given night and morning for two weeks, when the chills were finally arrested. Three days later the injections were discontinued and the patient discharged cured.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

THERE has recently occurred a rather lively episode in a side-wing of the medical world here. Since the Radical section of politicians has become a distinct factor in the Liberal ranks, and their voices have been heard in Liberal ministries, the education of the people has been distinctly kept in view. The Chartists were true to themselves in deciding that if every man ought to have a vote in the election of the legislators, it is well to educate him so that he may be fit to use it properly. Consequently, some ten years ago the School Board came into force,—otherwise compulsory education,—the rates being used to furnish the necessary outlay in proper school-rooms, etc. Now, of course, the argument that the brains of our children are the finest raw product of our country, and that England has obtained her position in the world by manufacturing raw products, and therefore the children must be educated, is sound enough. But, unfortunately, there is no such thing as unalloyed good in this imperfect world; and, laudable as this project is in principle, there have been found some drawbacks in the working. The London School Board has taken a decided step in the selection of the elementary books by which the children are to be taught, and the good effects of their judgment are to be seen in the array of school-books now issuing from the press, in every way a marked improvement upon, as well as contrast with, those of a period but little anterior to this movement. Everything is made as easy for the children as possible, but the encouragement given to the teachers to push them through the different standards, by making the additional salary to be won dependent upon the percentage of passes, has told upon the children unfavorably as regards their physical health. It is all very well to push on children who come to school with a full stomach and a well-fed brain, but when the belly is empty the brain flags; consequently, the excessive pressure, especially upon little half-fed town mites, has begun to tell in obvious effects.

Mr. Mundella, the head of the education department, is an advanced Liberal, and was originally a Chartist when young. A dispute arose first between him and Dr. Rabagliati, of Bradford, Yorkshire, who charged the School Board with overworking the children. As the dispute grew warmer, Dr. Crichton Browne, the Lord Chancellor's Visitor in Lunacy, was drawn into it. Perhaps Dr. Crichton Browne's name may not be unfamiliar to the readers of these letters (if such there are), but a few words about him may not be out of place. He first became con-

spicuous as the Medical Superintendent of the West Riding Asylum at Wakefield, where he not only administered the asylum in a manner to elicit the warmest admiration of all, but he started what was practically a school of psychological medicine. He fired his subordinates with his own enthusiasm. Careful clinical observations were followed by close examination of the bodies, as well as the brains, of those patients who died. The West Riding Asylum Reports were the most advanced works bearing upon insanity of their day. All of which testifies that there is a practical side to Dr. Browne's intellectual brilliancy. Such a man was not likely to make a mistake if he knew it; and he was not likely to make any mistake when he was asked to investigate the matter of overpressure in elementary schools, and agreed to do so, albeit the demands upon his time were already very great. He made his observations, and after that his report, which so far substantiated the fact that overpressure did exist that it was not allowed to see daylight without an appendix or rider attached to it from an official of the education department, named Mr. Fitch, explaining away much of it. The two were published together, whereupon a storm began to blow.

Dr. Crichton Browne has an unusually large vocabulary, and writes and speaks with a fluency and flow of language which is very unusual. Consequently, some newspapers talked of his rhetoric, and insinuated that this took the place of facts, or, rather, perhaps, that meagre facts were decked out in ornate language till they looked larger than they actually were,—a very unfair assumption, as Dr. Browne only used his ordinary language. He, of course, was not a man to be shut up or have his mouth closed in any such violent manner, and, in a series of letters in the *Times*, has thoroughly vindicated himself from the charges levelled at him. In this "policy of reprisals" the unfortunate official has been sat upon effectually, and has been taught a lesson which ought to be useful to others. At a recent meeting of the teachers of the Metropolitan Board Schools a motion approving of Dr. Browne's report was carried unanimously.

It is a great pity so much warfare has been occasioned, but it has had the effect of demonstrating that, however admirable education may be, there are limits within which it is well to keep, and that the brains of famished little children are easily overtaxed, and therefore that their tasks must be proportioned to their powers. Especially are home-lessons to be deprecated for poor little waifs that have no privacy for study. The whole controversy will bear fruitful results in time.

Of course the education department were disposed to treat Dr. Crichton Browne in that cavalier manner which has of late been the fashion towards the medical profession; but it made a mistake. If we had a few more men like Dr. Crichton Browne in our ranks it would be a most fortunate thing for the profession in every way. His spirited conduct will, perhaps, inspire others of our profession to kick back when assailed; and, further, such handling of a public department may teach officials to conduct themselves respectfully towards the framers of reports upon disputed matters, especially when these latter are invited to take upon themselves troublesome inquiries, as Dr. Browne was in this case. It would seem that human nature is human nature, and, whether a government consists of the representatives of the "few" or the "many," it has a tendency to be high-handed.

As a perfect contrast to Dr. Browne's ways and theory of life, may be mentioned a small storm in a teapot which blew recently betwixt a well-known member of the profession—more before the public some years ago than at the present time—and a not unknown member of the profession, who, however, does not hold a place in the first rank. The latter, some time ago, wrote a book on a subject upon which the former was a well-known writer some twenty or five-and-twenty years ago. On its appearance the ex-author wrote the author a letter of congratulation upon the work, and expressed a hope that before long some opportunity would be afforded him of teaching his views to students. In his advertisements of his book the author made use of this letter,—perhaps rather sharp practice, as the letter was evidently merely a private one. After the lapse of some time the advertisement was brought under the notice of the writer of the letter, who thereupon sat down and wrote a second letter indignantly protesting that he had never even seen the book. Of course this was a little too much for the author, who, having kept the first letter, sent it on for the writer's inspection. He admitted it was no forgery, but could not throw any light upon the discrepancies betwixt his two letters. Now, this curious letter-writer is a man who occupies a high position in his college, and in so far ought to tread warily and set an example. His conduct is that of too many who creep into conspicuous positions,—viz., a mixture of insincerity and professing righteousness, which does not always succeed.

The natural interpretation of the two contradictory letters is not far to seek, and is probably this: On noticing the book (being an authority on the subject), he writes to the author a fulsome letter, evidently not the outcome of careful study of the work (for he does not even remember it), but in order to impress himself upon the writer, who lives out of London, and who might have patients coming up to town, which patients might wish to know whom to consult when there. The *tout ensemble* of the thing looks most

suspicious. And when the flattered author makes another use of the letter to what its writer expected,—viz., employs it for advertising purposes,—the writer gets up some virtuous indignation and writes another letter of totally opposite character. In this instance the schemer fell into his own trap in a manner utterly unexpected. It is a trifle, but it reveals a depth of depravity that is certainly not assuring at a time when the medical profession is writhing in the agonies of all-round snubbings, when the Medical Amendment Bill has been twice rejected by Parliament, when the medical press has been using forcible language to the Corporations, and even when the conduct of the General Medical Council has been the subject of some strong animadversions. Self-respect leads to the respect of others; and our profession at present seems only too strongly inclined to give the enemy opportunities of which it avails itself, to the detriment of the profession and the regret of those of it who see clearly what the real position of affairs is, and how small are our prospects of raising it if leading members of the profession act as the writer of the letters just referred to has done. It is piteous to see men of position dropping themselves by their own deeds and doings into such very questionable positions, from which a little self-respect would save them. It is the old story over again. When Moses tarried on Mount Sinai for the tablets containing the Decalogue, Aaron in the mean time gathered the gold of the tribes and made a molten calf, and the people worshipped, crying, "Here be thy gods, O Israel, which brought thee up out of the land of Egypt!" So it was then, and so it is now. And the worshippers of the golden calf are after idolatry yet! We certainly do seem in need of some other gods than those in vogue at present.

Those of the inhabitants of the United States who feel an interest in forthcoming generations will read with a sense of instruction a small work on "Dental Caries" just issued by Henry Sewill, a well-known dentist here. It is not so much the pathological relations of the wide-spread evil, but its causal relations, which will attract their attention. Mr. Sewill holds that as civilization progresses the jaw lessens, and then the teeth are imperfectly developed, and, consequently, from cracks or pits in the enamel of these teeth the immediate causes of caries make their way into the tooth, and so work its ruin. As the teeth of the inhabitants of the United States are notoriously in a bad way, it may be well for those intending to marry to know that "crowding and irregularity of the teeth are mostly caused by smallness and malformation of the maxillæ,—a condition which is, no doubt, largely associated with the physical type presented by highly-civilized man." Consequently, "sexual selection" is a great force in action. "The type of female beauty for many ages has included a small, delicate jaw, the heavy jaw, or anything approaching to prognathism, being universally deemed a disfigurement." However desirable, from the point of view of tooth-development, it might be to select a spouse of the "mickle-mouthed Meg" type, who so exercised the mind of one of the ancestors of Sir Walter Scott, it is scarcely to be expected that a man will marry for the sake of the teeth of his grandchildren. Mr. Sewill, indeed, seems to see this, for he adds, pathetically, "I am afraid we cannot hope that, for the sake of the teeth of posterity, men will be advised to pick out big-jawed wives; but we can, at least, seriously impress hygienists with the fact that the human jaw, for its due development, needs adequate use, and that no dietary, however otherwise suitable its constituents, can be perfect which is composed of uniformly bland and soft substances calling for little or no mastication." And then he falls foul of the French cook, as follows: "The French use their jaws less than any other nation; they are the best cooks in the world, and the whole population, without exception, lives upon the softest food, including bread of the most delicate manufacture."

Having thus laid a ban upon "beauty's bewitchment" with a delicate chin in the choice of a wife, and pointed the finger of scorn at the French cook, it is a relief to find that he feels no animosity or rancor towards the schoolmaster. "It has been plausibly argued that dental deterioration—and especially progressive deterioration—may be accounted for by the overwhelming demands upon the vital powers by the growth of the brain and its increased exercise in modern life. The brain and the jaws are alike fed from the common carotid artery, and, it is urged, the demand for blood by the growing and working brain leads to imperfect supply of the masticatory organs. This argument gains support from the fact that the people of the United States, with certainly the worst teeth, present a type of humanity one of whose most striking characteristics is enormous activity of brain and nervous system, with expenditure of vital energy through these channels. But I believe that we shall find this hypothesis will not work, and it remains hypothesis, difficult of negation, impossible of proof." Just think what a long sigh of relief the founders of general education in New England must draw at this expression of opinion,—that is, if disembodied spirits possess inspiration. Perhaps those beings in "astral forms" (*à la* Madame Blavatsky) will kindly convey Mr. Sewill's opinions to the shades of these Puritan worthies as a work of human charity!

In case any spirited American citizen, fired by Mr. Sewill's remarks, wishes to sacrifice himself and his tastes in order to secure a perfect set of teeth for his descendants, the

writer could recommend to his attention the "Earthmen" (and women) from the Kalahari Desert, in South Africa, now on show at the Aquarium, Westminster. They are the most complete savages on the globe (unless it be that lowly tribe living in California, the Digger Indians"); but they present ideally perfect teeth to the eye of the observer,—teeth the enamel of which is perfect, without flaw through which acids and bacteria could penetrate into the interior. How far, however, against this tooth-perfection may weigh sundry drawbacks it is impossible to say. Their women do not seem calculated to form intellectual companions for civilized men; and though the jaws which carry these perfect teeth are not remarkably prognathous, still the face is not attractive, nor its expression very *spirituelle*. If, however, in his new-born enthusiasm he is willing to cast aside everything as compared to dental perfection, he could find a bride to his mind among these human vipers,—for little yellow brutes with poisoned arrows are these "Earthmen."

What Mr. Sewill does regard as a great cause of that imperfect development of enamel which predisposes to caries the reader must seek in the book itself, which is replete with information of much practical value. If the reader is not equal to the self-denial of espousing a big-jawed savage, it may be no breach of confidence to tell him what Mr. Sewill thinks it well to avoid in a wife: "This is the type most frequently found in females in which there is often, with a fragile form, considerable facial beauty; in which the eyes are large and expressive, the complexion fair, with the blue veins visible beneath the skin. This is the not uncommon type which, without further description, will be recognized, and in which I have invariably found the teeth, although well shaped and often uncommonly white and beautiful to look at, covered with the softest and most defective enamel."

Really, what betwixt Dr. Crichton Browne and Mr. Henry Sewill,—too much education and perverted ideas of beauty,—civilization seems to be progressing too fast for the physique of the future.

J. Milner Fothergill.

CHICAGO.

SINCE my last letter the new Presbyterian Hospital has been formally opened and patients admitted. The building, though not large, is well appointed, and possesses all the modern and most approved conveniences, ventilation and heating being so arranged as to give the best results. The beds, as soon as ready, have been quickly occupied, and at this time everything about the hospital is moving smoothly and satisfactorily. The interest of Rush Medical College in this institution was transferred to the Presbyterian Board, with the understanding that the trustees of Rush should appoint the medical and surgical staff. This has been done in as impartial a manner as possible, but not without some dissatisfaction to the other medical schools of our city. Some of the positions were tendered to members of the several faculties of our schools, but were declined by the gentlemen to whom they were offered, on the plea of not having necessary time for the proper administration of the duties; others stating that the hospital was at an inconvenient distance, etc. The result is that the new hospital has been styled a "mere appendix to Rush Medical College."

The facts are that the staff is a good one, and, though strongly represented by Rush, no fair-minded observer can offer reasonable objection, in view of Rush Medical College having transferred to the Presbyterian Board all interest (not by any means insignificant) in the property, and all control other than appointment of staff for service.

Our County Asylum for the Insane is now the scene of great contention and not a little disordered investigation. For many years this institution has been the prey of political hangers-on, the different offices being too often filled by persons wholly incompetent,—each official enjoying a sinecure, delegating his duties to subordinates or patients. In addition, there seems to have been systematic misdirection of the charity,—funds finding a resting-place in the pockets of interested leeches, and patients left without necessary care and bodily comforts. A few months ago Dr. Spray retired from the superintendency, and was succeeded by Dr. J. G. Kiernan, who at once joined hands with Dr. S. V. Clevenger in an effort to bring about needed reform in the administration of the general affairs and the treatment of the patients.

These gentlemen found six hundred and fifty people huddled together in quarters barely sufficient to accommodate three hundred. This condition could only be partially ameliorated, and Drs. Kiernan and Clevenger addressed themselves to the correction of the most flagrant abuses, and in so doing excited the wrath of the County Board. For a time there was a war of words, and then came positive action on the part of the superintendent. Inefficient subordinates were discharged, and their places filled by persons selected by Dr. Kiernan without reference to the wishes of the politicians.

This was followed by a bitter controversy with the former superintendent, resulting in threats of violence against Dr. Clevenger, the pathologist.

In a short time Dr. Clevenger succeeded in interesting the Citizens' Association in the affairs of the institution, and an investigation was commenced. He has, in addition, sent copies of a printed letter to the members of

the County Board, reciting that the employés are in a state of rebellion against the superintendent, and that the medical officers will be compelled to resign unless they take some action. At the last meeting of the Chicago Medical Society the case was again stated by Dr. Clevenger, and a committee of professional men was appointed to act with laymen in an examination of the charges preferred by the officers of the asylum.

While the abuses are beyond question, the means for their correction have not been well directed, because of the too personal character of the controversy. The same thing might be said of more than one of our State institutions; but it is not likely to be said as long as the present political qualification system prevails.

Scarlet fever is quite prevalent, and in this connection it is quite interesting to observe how many householders and others avoid open display of the red card. By a little persuasion, the visiting health officer nails the caution-card upon an inside door, often back at the end of a dark hall, where it cannot be seen. This practice is most common in large boarding-houses, where it is the more reprehensible as it assists in the spread of the disease by begetting a false sense of security.

Diphtheria is beginning to attract attention, and fears are expressed that it is likely to become wide-spread.

Our medical schools have entered the fall term with increased numbers over those of last year, and the graduating classes will be larger than ever before. M.

November 18, 1884.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THE Semi-Annual Conversational Meeting of the Society was held October 23, 1884, the President, E. O. SHAKESPEARE, M.D., in the chair.

Dr. FRANCIS DELAFIELD, of New York, by invitation, read a paper on

*The pathology of broncho-pneumonia.**

Dr. PEPPER said he had listened with very unusual interest to the paper of Dr. Delafield, in which he had so distinctly and concisely set forth his views on this very common disease.

He thought that all who had listened to Dr. Delafield would agree with him in congratulating the author upon the clearness and force with which he had described a condition which had hitherto often been confused by prolix description and by want of definiteness in separating different anatomical conditions. In regard to the term "broncho-pneumonia," which Dr. Delafield prefers, he has proved by his anatomical studies of the infiltration of the bronchial walls and of the surrounding parenchyma, that this term is strictly applicable to the cases upon which this paper is based.

Dr. Pepper stated, however, that, though chiefly from a clinical stand-point, he was inclined to prefer the term catarrhal pneumonia, as probably including the form described by Dr. Delafield, as well as certain other forms which seem to him to be necessarily included in a complete picture of the disease.

For instance, there are many cases in adults which begin with rigor, followed by high fever, with temperature of 102½° to 104° F., with cough hard and dry at first, and later with muco-purulent expectoration, with no very definite physical signs. Careful examination will show local impairment of resonance, coarse crackling râles on deep inspiration, and weak vesicular murmur. This condition may be limited to the apex or to the neighborhood of the root of one lung, or may occur elsewhere. The cases have a duration of from eight to twelve days, and terminate by lysis with resolution, though not rarely some cough remains, and the lung is sensitive and prone to recurring attacks, which in subjects predisposed to phthisis may induce that disease.

It seems to him difficult to regard these cases as anything else than mild catarrhal pneumonia; for this type of pneumonia agrees with other catarrhal affections in the wide range of severity presented by different cases. On the other hand, there are cases, much more common in children, in which disease extends from the bronchial tubes into the lobules to which they lead.

The commonly-accepted opinion that the lining of the alveoli and air-vesicles is susceptible to catarrhal inflammation, appears to me well established. In such cases the disease may extend outward to the peribronchial tissue, as emphasized by Dr. Delafield, and lead to secondary interstitial changes, and also, in consequence of obstruction of bronchi, atelectasis occur; the aspiration of irritating bronchial products may fill some of the alveoli, or finally they may become impacted with the results of catarrhal inflammation of their walls. Subsequently, caseation with softening may give rise to small abscesses with breaking down of the walls of the air-vessels, or with perforation of the pleura, or inspissation may occur with reabsorption of infectious material, with the development of general tuberculosis.

It did not seem necessary to dwell upon the cases in which atelectasis occurred as a primary condition with the subsequent development of pneumonic centres.

It seems to him impossible to consider ca-

* See page 153.

tarrhal pneumonia without taking the comprehensive view which would include all the varieties above indicated; though the term "broncho-pneumonia" as used by Dr. Delafield might be most appropriate to the special conditions described by him.

Allusion was made to the very interesting physical signs attending the course of atelectasis in the course of catarrhal pneumonia of children or of adults, where considerable areas of the lung, or even an entire lung, might pass into this state, to be followed before long by the re-establishment of respiration and the disappearance of the physical signs. Difficult questions of differential diagnosis may present themselves, requiring critical examination. From an allusion made by Dr. Delafield, it appeared that he regarded lobar pneumonia as being, like broncho-pneumonia, induced by the ordinary causes of idiopathic inflammation. The argument, which did not favor the view that all lobar pneumonia is a specific constitutional disease, or is dependent upon a special microbe, did not appear to be conclusive, and he was glad to know, from the remarks of Dr. Delafield, that he holds the same view.

Dr. BRUEN said he rose to call attention to the observations of Hamilton, of Aberdeen, in reference to the peculiar basement-membrane of the bronchial tubes, which determines the chronicity of bronchitis, and probably the interstitial changes in chronic broncho-pneumonia. Hamilton, in speaking of the denseness of this basement-membrane, gives it the importance of a fascia, which determines the direction in which the inflammatory products of bronchitis shall be absorbed,—viz., by the lymphatics rather than by free exudation into the bronchial lumen. The interlobular connective tissues are permeated with fibrous bands, which radiate from the fibrous coat of the bronchi towards the pleural surface. Dr. Bruen thought that, if careful study of the lymphatics were made, the absorbed products of an acute or subacute inflammation could be traced throughout the lung, finally leading to enlargement of the bronchial glands.

The importance of the basement-membrane is further illustrated by the phenomena of pneumonikoniosis and anthracosis. Immediate absorption from the bronchial tubes does not occur, although the tubes are always exposed to carbonaceous matter, as evinced by the blackened sputa, yet the tubes are unpigmented, the carbonaceous or organic dust being carried down into the alveoli, whence it is absorbed, and the whole parenchyma of the lungs and the bronchial glands are blackened, but always strictly in the course of the lymphatics.

In children of a strumous habit, forms of bronchitis of an obscure nature often occur. Congested areas near the root of the lung are recognizable; abundant mucous râles and frequently laryngeal spasm at intervals form an important symptom. These symptoms are often referable to enlargement of the bronchial glands, and the nervous symptoms are due to irritation of the pneumogastric nerves.

Dr. J. C. WILSON asked whether Dr. Delafield designed to describe one variety of a group of affections to which the terms broncho-pneumonia, catarrhal pneumonia, desquamative pneumonia, etc., are somewhat vaguely and interchangeably applied, or to include the whole group in his account, and under the designation of broncho-pneumonia. If Dr. Wilson had understood the paper aright, he thought it certainly had referred to an especial variety of the affection in question, for there are encountered cases which differ both clinically and anatomically from the disease described by Dr. Delafield, and in which the lesions spread not only in a direction internally, from the affected bronchial tubes to the peribronchial structures, but also in the direction of the long axis of the tubes to involve the terminal (subpleural) vesicles, and this, according to widely-accepted views, often without antecedent atelectasis.

Dr. CARPENTER said that he had very little, indeed, to give of value in a pathological discussion, but would say, at the same time, that after thirty years' experience he had arrived at certain conclusions, not perhaps new, but which had been gathered in one set of cases,—viz., anthracosis. They are a very striking set of cases. They all originate in a bronchitis, which differs from the ordinary form of that disorder in one very striking symptom,—viz., great oppression of breathing. This oppression is far greater than can be accounted for by ordinary bronchial inflammation. It depends on interstitial disease or peribronchitis. A true broncho-pneumonia is set up, the cause being a special one,—viz., inhalation of coal-dust. In these cases so great obstruction to the circulation is caused by the interstitial exudation that the circulation is very seriously embarrassed. The heart suffers, dilatation, or hypertrophy with dilatation, is produced, and a form of dyspnœa, known as miner's asthma, occurs. These cases are essentially chronic ones. He had only the day before seen a patient die with this disease who had been under his care for several years, and in whom no lesions but those of peribronchitis could be detected.

Many of these cases, however, in a chronic progress, do develop all the symptoms of phthisis. Slow alterations of structure occur, cavities form, and all the pathological conditions of the so-called fibroid phthisis are found on post-mortem examination. He therefore claimed that these cases are entitled to constitute a special form of broncho-pneumonia. He agreed with Dr. Pepper that acute or subacute broncho-pneumonia left sensitive areas, leading often to subsequent phthisis. In his observation, fibroid phthisis was not a true tuberculosis, but a chronic de-

generation of lung-tissue, due to a pre-existing broncho-pneumonia, such as he had observed in anthracosis.

Dr. OSLER said that his experience in many points tallied with that of Prof. Delafield. In the broncho-pneumonia of adults the pneumonic process, he believed, most usually spreads from the bronchi. He referred also to those cases of broncho-pneumonia which followed brain-injury, or disease affecting the pneumogastric centres. In such cases the disease was deeply seated, and we find that the morbid process often surrounds the bronchi but does not involve the terminal alveoli. The reverse is true in the case of children, in whom the disease is more peripheral, is nearer, and may be just beneath, the pleura. He was glad that Dr. Carpenter had raised the point as to anthracosis. Dr. Osler had been able to examine several cases of this affection in its very early stages, and could testify that it begins in the bronchi and thence extends to the peribronchial tissues. It is primarily then a broncho-pneumonia, and in every case he had found small disseminated black lumps resulting from localized broncho-pneumonia, which, by their fusion and extension, produce a form of fibroid phthisis.

Dr. TYSON had little to add to what had already been said. He had, however, first expressed his gratification at the simple clearness with which Dr. Delafield had presented the question. Dr. Tyson had been very much impressed with the diversity of nomenclature of the disease under consideration, and it would be usful if we could agree upon some common term. For a long time desquamative pneumonia had seemed to him to be the best term, but from a study of the pathological histology he thought the term peribronchial pneumonia more suitable. If now the adjective desquamative be added, we have a term which will be still more comprehensive and exact.

Dr. Tyson thought that our understanding of the enormous peribronchial cellular infiltration would be much simplified if we lose sight altogether of the idea that there is essentially any form of inflammation except interstitial inflammation. He had come to the conclusion that there is no such thing as catarrhal or parenchymatous inflammation, the phenomena usually considered characteristic of these being secondary. The wandering out and massing of leucocytes is the one essential factor of the inflammatory process. He would like to ask Dr. Delafield where he would draw the line between this process and tubercular phthisis. He presumed that Dr. Delafield agreed with all other observers in admitting that broncho-pneumonia does sometimes terminate in tubercular phthisis, and when this occurs it is often difficult to say where the broncho-pneumonia ends and where the phthisis begins, although the extremes may be easy of recognition.

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Dr. FORMAD would like to ask the lecturer's instruction how to distinguish broncho-pneumonia in its *chronic* form from *tubercular* broncho-pneumonia. Like Dr. Tyson, he felt that he was unable to draw a line of distinction between the two affections. Indeed, he had been unaware of a non-tubercular form of broncho-pneumonia in man until he saw Dr. Delafield's excellent records and representations of this lesion; this being explained by the fact that he had dealt almost entirely with the dead, while most of the speakers had shown that, although broncho-pneumonia in its *acute* form was a common disease, it did not prove fatal in the vast majority of cases, the patients either getting well or the disease assuming a chronic course.

Dr. Formad fully recognized *acute* broncho-pneumonia as an independent affection, although he believed to have observed this lesion post mortem only in dogs, such as induced artificially by means of forced inhalations of a spray containing irritating particles. Dogs with such artificial broncho-pneumonia (even if tuberculous sputum was resorted to to induce it) Dr. Formad had observed always to recover within a couple of months; but if the dogs were killed before the end of the first month after the operation the post-mortem showed invariably an acute broncho-pneumonia not distinguishable from that described by Dr. Delafield as occurring in man. Throughout the lung-substance are seen small nodes of irregular outlines in size resembling tubercles.

Under the microscope these nodules show to consist of mere unorganized collection of cells, often in a state of retrograde change and mixed with mucus and débris; this exudate being limited to the lumina of the bronchials and their pertaining groups of air-vesicles (the acini) which they fill. On section these artificial boundaries give rise to the appearance of nodes. Very often epithelial cells and mucus from the bronchi have been seen intermingled with the purulent contents within the air-vesicles; this suggests that the exudate contained in the latter may have been partly aspired from the bronchi (during forced breathing) and was lodged in the air-vesicles as foreign material.

These lesions have been mistaken by stupid observers for true tubercles. *Acute* broncho-pneumonia in man appears to be a lesion perfectly analogous to the one described above in dogs. The human disease once becoming chronic, its distinction from tuberculous broncho-pneumonia ceases.

Dr. DELAFIELD, in closing the debate, said that all the speakers had brought out what was one of the most difficult points concerning broncho-pneumonia, namely, its limitations. Strictly speaking, every pneumonia is a broncho-pneumonia, and the application of the term to a certain group of cases is of course arbitrary. He believed, however, that the

name is most properly employed to designate the group of cases which he had described.

In anthracosis there is a chronic bronchitis and also a chronic pneumonia, but yet the lesion is not, properly speaking, a broncho-pneumonia.

He did not believe that the inflammation travelled directly from the bronchi to the air-vesicles into which they entered, but that the appearances which simulated this were due to atelectasis.

He thought that the term catarrhal pneumonia was a very bad one, and that the air-vesicles were structures entirely different from mucous membranes.

He did not believe that broncho-pneumonia was a form of phthisis or led to phthisis, but that phthisis had its own special anatomy from the very beginning.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING, NOVEMBER 6, 1884.

The President, R. A. CLEEMANN, M.D., in the chair.

REMOVAL OF UTERINE APPENDAGES FOR MENSTRUAL EPILEPSY—RECOVERY.

DR. E. E. MONTGOMERY exhibited the specimens and read the history of the case. Sarah H., æt. 17 years, was admitted into the Philadelphia Hospital April 1, 1884. She suffered from an attack of inflammatory rheumatism in childhood, and began to have epileptic seizures in her thirteenth year. These were slight at first, but have recurred every month, increasing in number and violence, so that at present she is unconscious from ten days to two weeks out of each month. There has only once been a trace of menstrual discharge, and that for a single day only. There is no history of any chronic disease in the family: brothers and sisters are healthy. The patient was pale, flabby, anæmic, poorly developed, and extremely nervous. The external genitals were but slightly developed, the uterus small, and no special tenderness over the pelvis. Iron, tonics, and a generous diet were given; the bromides were not well borne. Owing to her youth and the fact that she had not yet menstruated, it was deemed best to undertake to establish the menstrual function and exhaust the antispasmodics before resorting to operative interference. The failure of all remedial measures was complete, and on September 13 the operation was performed; both ovaries and tubes were removed. No antiseptic was used about the wound. All the water used had been well boiled. Absorbent cotton was placed over the wound, which had been closed with silk sutures. The operation occupied thirty-five minutes. The recovery was uninterrupted until the night of the 26th of September, when she had four epileptic seizures. There were recurrences of slighter attacks during the next three nights, but they were shorter, and during the intervals she was perfectly conscious. During the first four days of October, spells of staring, with momentary unconsciousness, occurred, becoming less frequent and lighter. A well-marked convulsion on the night of October 14 was followed by from one to four convulsions daily until the 29th. But they have not been so severe as before the operation.

REMOVAL OF PAROVARIAN CYST—RECOVERY.

Dr. E. E. MONTGOMERY presented the specimens and related the history, as follows: Mrs. A., æt. 30 years, native of England, married, never pregnant, has suffered from an enlargement of the abdomen for seven years. As it was first noticed a few months after her marriage, she supposed herself pregnant. Her menses have never been interrupted, now occur every three weeks, are very slight, and have never been excessive. She suffers from severe pain the week before menstruation over the lower portion of the abdomen and through the hips. She suffers at other times from pain in the feet and legs and from a sensation of weight. The tumor has been tapped some six times; the fluid was always of a pale straw color. The largest quantity removed at any one time was forty pounds. Previous to its removal her weight was one hundred and two pounds. The last tapping was on June 27, 1884. She has had four attacks of peritonitis.

When first seen, last July, two weeks after the last tapping, the abdomen was swollen and tender to pressure; fluctuation was distinct. Since that time the abdomen has increased considerably in size, presenting a prominent tumor, distending the whole abdomen, nearly symmetrical, but projecting slightly to the right side. Circumference at umbilicus, thirty-two inches; distance from symphysis to umbilicus, seven inches; to ensiform, thirteen inches. Fluctuation distinct over the whole tumor. Coughing projects the whole mass forward and downward. Her general condition is good; she is quite active.

Diagnosis.—A parovarian cyst.

Plan of Operation.—Exploratory incision, remove the tumor if possible; but, if the adhesions were too great to permit that, then to open the sac, stitch it to the integument, and introduce a drainage-tube, and thus secure obliteration of the sac.

Operation.—October 9. Abdominal wound four inches; adhesions universal, but generally broken up without difficulty; no ligatures were needed. The intestines were not seen, being concealed by old inflammatory

deposits. The right ovary was enlarged, and was also removed. The wound was closed with seven sutures, and a glass drainage-tube introduced. Salicylated cotton in a thick layer was placed over the wound. Suppositories of morphia were used to control pain, which continued to a greater or less extent for two weeks, arising partly from inflammatory conditions and partly from collections of gas in the intestines. The abdominal wound discharged freely, three ounces the first day. The drainage-tube was removed on the 13th, four days after the operation, but the discharge of bloody serum, pus, and flaky lymph continued for full two weeks later, when the wound closed entirely and the patient was discharged.

Dr. B. F. BAER presented the specimens and read the following report of a case of

PLACENTAL POLYPUS WHICH SIMULATED MALIGNANT DISEASE OF THE UTERUS.

The patient was 35 years of age, married, and had two children at full term, the last twelve years ago. She has had several abortions since, but otherwise she has enjoyed good health. Her mother died at the age of thirty-eight, of cancer of the uterus. In the early months of this year our patient first noticed that her catamenia were becoming too frequent and were attended with expulsive pains and a fetid, watery discharge in the intervals. The blood-loss increased in quantity, and she soon began to show signs of failing health in pallor and loss of flesh. She would not permit a physical exploration until the latter part of July, when she had a violent flooding, with great pain.

Examination now revealed to Dr. R. Armstrong, of Lock Haven, Pa., whose patient she was, a healthy condition of the cervix and a normal os, but the body of the uterus was enlarged to more than double its natural dimensions; it seemed to be symmetrical and rather softer than usual. The hemorrhage was controlled by ergot and rest. Although the grumous fetid discharge and the uterine tenesmus continued, she did not have another severe attack of metrorrhagia, probably because of her exsanguine condition and the fact that she was suffering from septic absorption. Her temperature rising as high as 104° in the afternoon, she had distinct rigors. Her abdomen was tympanitic and very tender to the touch. The physical condition of the uterus led the doctor to introduce two tents into the cervical canal on September 23. They were allowed to remain twenty-four hours, although their presence increased the violence of the symptoms. When the tents were removed, a rather soft, friable mass could be felt presenting at the internal os. This led to a fear that the disease might prove to be malignant. A severe colliquative diarrhœa now set in, and the patient's strength became so much reduced that nothing could be done except to administer remedies to check the diarrhœa and prevent collapse.

On the morning of the 25th, through the kindness of Dr. Armstrong, I saw the patient. Temperature 103°, pulse rapid and weak. Stomach irritable, rejecting everything taken, bowels still quite relaxed. Her face presented the ashy hue of malignant disease. The outlook was not favorable for an operation, which would necessitate the dilatation of the cervix sufficiently to remove the diseased tissue, which evidently occupied the uterine cavity, but it was the only course to pursue.

Ether was administered. The uterus was found retroverted and adherent to the floor of Douglas's cul-de-sac. The cervix was rigid and but slightly patulous. In view of the existing peritonitis, we concluded that it was best that I should endeavor to remove the contents of the uterus without a further attempt at dilatation, fearing rupture of adhesions and increased inflammatory action. I passed the wire loop of the écraseur through the os, and by careful manipulation luckily succeeded in getting it over the tumor and up to its attachment. Drawing upon the wire, it closed around the pedicle and severed it. The tumor was seized with a volsella forceps and delivered. The index-finger could now be passed into the cavity of the uterus. The pedicle was situated on the posterior wall, near the fundus. The tissues at that point were soft and friable, but the remainder of the surface of the uterine cavity appeared to be free from disease. The stump was cauterized with nitric acid and a two-grain opium suppository placed in the rectum. Convalescence was rapid and satisfactory.

On section and close examination the specimen very much resembles placental tissue, and the microscope shows typical placental villi in its structure. It is the *placental polypus* described by C. Braun in 1851, and somewhat resembles the *fibrinous polypus* of Kiwisch, who thought that these polypi might arise from long-persistent hemorrhage, a kind of apoplexy of the womb, a large coagulum forming, the upper part consisting mostly of fibrin and adhering by a stalk to the uterine wall, whilst the lower consists of red, soft coagulum having a coat of firm fibrin. Scanzoni does not admit this view. He contends that these are cases of abortion, and would therefore fall under the class of placental polypi (Barnes). My own experience agrees with that of Scanzoni. These polypi cause profuse metrorrhagia, and sometimes, as in this case, blood-poisoning.

This case furnishes another strong argument in favor of the entire removal of the decidua or placenta after abortion. Who can tell how many lives are lost, or in how many cases the health is undermined, by a neglect of this procedure? Death would inevitably

have occurred in this case if the uterus had not been emptied. The patient may suffer for months or years as a result of neglect. In this instance the fault was in the patient, for she had been properly advised by her physician. It is true that many cases escape without serious injury; but that does not prove that the principle and practice of immediate removal is not always the safe one, for here is a case where a neglected abortion had apparently passed off safely, but it almost destroyed the patient's life a long time afterwards.

Malignant disease was properly suspected from the rapid development of such grave symptoms, from the general cachectic appearance of the patient, and from the sensation conveyed to the finger when touching the growth *in situ*. But when it was found that it had a limited point of attachment and that the uterine cavity was healthy at all other points, this hypothesis was weakened, and when more careful examination of the specimen and investigation with the microscope showed it to contain placental villi, its benign character was assured.

Dr. MONTGOMERY remarked that in cases in which partial dilatation of the uterine canal had been accomplished before the patient presented, the best instrument to continue the dilatation is the mechanical urethral dilator of Dr. A. H. Smith.

HAIR-PIN IN THE UTERUS.

Dr. B. F. BAER exhibited a hair-pin removed from the uterine cavity of a patient sent to him by Dr. Pancoast, of Camden, New Jersey. The woman, believing herself to be pregnant, had tried to produce an abortion by inserting the pin by grasping the points and inserting the blunt end. The patient had obtained a view of the parts in a mirror placed upon the floor. The presence of the pin was readily detected by the uterine sound. He at first thought of dilating with tents, but, the patient being greatly alarmed and very importunate, he used the steel dilator. One point of the pin became embedded in its descent in the tissues of the cervix, and required dissection to release it.

Dr. WHARTON SINKLER exhibited a hair-pin removed from the vagina of a patient who had tried to introduce it into the uterus to produce abortion. She had failed in her purpose, and had also failed to remove it from the vagina. The doctor found the points of the pin widely separated, presenting downward, and hooked into the walls of the vagina. By bringing the points close together, the pin was removed without difficulty. It had been in the vagina for some time.

Dr. MONTGOMERY stated that, while a student, he had seen a hair-pin removed from a vagina. It was thickly incrusted with a calcareous deposit.

PHILADELPHIA CLINICAL SOCIETY.

MEETING OF OCTOBER 24, 1884.

DR. BEATES in the chair.

DR. E. E. MONTGOMERY reported a

CASE OF EXTRA-UTERINE PREGNANCY—RUPTURE, PERITONITIS, RECOVERY.

March 19, 1884.—Mrs. M., has had four children and two miscarriages, the last miscarriage occurring some four months since. She has for several years suffered from chronic phthisis. Menstruation was absent for two periods, but two weeks ago she had a bloody discharge for several days. Although she had been suffering from the phenomena usual to her in early pregnancy, she then concluded that she was not pregnant.

On the 18th, after a fright, she was taken with severe pain in the right side, which, continuing to grow worse, was attended by frequent micturition, a sensation in the pelvis of weight or bearing down, intermittent vomiting, and a serous vaginal discharge. Her husband called at 3 A.M. to-day (March 19), informed me she had cramps, and asked for a prescription for her relief. I gave a prescription containing morph. sulph., gr. ¼ to each dose, to be given every two hours until relief.

I saw her at 8 A.M., when she was quite pale, complaining still of pain in the right inguinal region. As I had a clinic at 9 A.M., I made a hurried visit, injected morph., gr. ¼, hypodermically, and ordered ℞ Quin. sulph., gr. ij, ext. opii, gr. ss, in pill, every three hours.

5 P.M.—Pain somewhat relieved, stomach very irritable, would retain nothing, pain greatly increased by vomiting, face pinched, pale, and anxious-looking, lips bloodless, pulse 90. Bimanual examination disclosed the uterus slightly enlarged and retroverted. Douglas's cul-de-sac presented a mushy or doughy sensation; on the right side could be felt a small, irregular-sized mass, which was diagnosticated to be an escaped fœtus from a tubal pregnancy. The pills were discontinued, and ext. opii, gr. j, in suppository, substituted, to be given every six hours, and an alkaline mixture and f℥ss each of milk and lime-water were given every three hours by the stomach.

20th.—She slept poorly, but does not suffer so much from pain. There is marked tenderness over the lower part of the abdomen, more marked upon the left side. Examination per vaginam; the mass is felt posterior to the uterus, and is quite hard and tender upon pressure. The uterus is fixed; pulse, 90; vomited once. She has been kept perfectly quiet; the bladder relieved by the catheter. ℞ Quin. sulph., gr. v, ext. opii, gr. iss, in suppository, every six hours.

21st.—General condition better, though she slept but little. The introduction of the suppositories was attended with so much pain that they were discontinued, and morph. sulph., gr. ¼, with quin. sulph., gr. ij, given every three hours, by the mouth.

22d.—Some sickness of the stomach; pulse 88, temperature normal; very nervous, easily disturbed. Abdomen still tender to pressure. Returned to the use of the suppositories. Slept well last night after tr. op. deod., gtt. xxv, were given.

24th.—Temperature normal. Pulse 80. Abdomen still tender, especially over the lower portion and left side; movement attended with pain. The suppositories induced so much pain that they were discontinued, and tr. op. deod., gtt. xxx, given by the mouth every three hours.

Subsequent to this date the convalescence was gradual. She regained her strength very slowly. She left the city the latter part of July, returning about the middle of September again pregnant.

Upon examination a few days ago the uterus was found enlarged to the usual size at two months, and posterior to it could be felt a smaller mass, in which the remains of the former gestation were evidently encapsulated.

In such cases, it becomes an important question to decide when we should proceed to surgical measures.

Notwithstanding the successful termination of this case, I would not uphold the treatment as the one most likely to yield a favorable result.

Had the symptoms of shock and internal hemorrhage persisted during the third day, as upon the second, it was intended to make an abdominal incision, remove the fœtus and effused blood, and ligate the bleeding vessels. Such a course, pursued with the advent of the characteristic symptoms, would, without doubt, decrease the mortality of the accident.

Dr. MONTGOMERY also reported, for Dr. JAMES SIBBALD,

A CASE OF EXTRA-UTERINE PREGNANCY TREATED SUCCESSFULLY BY ELECTRICITY.

Mrs. R., æt. 34 years; a woman weighing one hundred and seven pounds, of spare build and exceedingly nervo-bilious temperament. Was married when twenty-one years of age, and had a miscarriage about five months subsequently, since which time (for thirteen years) she was never pregnant, although very desirous of becoming so.

Her menstrual periods were always regular and natural up to June 16, 1884, at which time there was no sign of menstruation. One week later she commenced feeling sick in the morning, and also complained of soreness, with decided tenderness, on pressure over the right inguinal region, which gradually increased in severity. At the same time bloody discharges would appear, with no regularity, every week or two, lasting from a few hours to several days.

On July 3, while standing in the street dealing with her butcher, she was suddenly seized with a violent pain in the abdomen, which caused her to fall in the street. She was picked up and carried to her bed. Morphia was administered hypodermically and poultices applied for six days before the tenderness subsided. For the next three weeks there was more or less tenderness over the right inguinal region.

On August 4 (just one month after the first attack) she had a second attack of local peritonitis, which lasted five days. At this time she was sweeping the floor, when she suddenly fell, overcome by the severe abdominal pain.

After the acute symptoms of the first attack had subsided, a vaginal examination revealed a soft mass on the right side of the uterus, very sensitive to pressure, and displacing that organ to the left. The sound was passed cautiously into the uterus a distance of over four inches, without obstruction. These facts, in connection with the cessation of menses, morning sickness, some enlargement and soreness of breasts, with occasional bloody discharges from the uterus, warranted a diagnosis of extra-uterine pregnancy.

On August 18 Dr. Montgomery saw the case in consultation, and coincided in the diagnosis. He advised the destruction of the fœtus, which was now in about the eleventh week of gestation, by means of electricity. Eight applications of the battery were made, which had the desired result. The mass is slightly perceptible on examination at the present time, the womb being still displaced to the left side. Menstruation has returned twice since, being perfectly normal, and no inconvenience is now experienced.

DISCUSSION.

Dr. JOHN B. ROBERTS coincided with Dr. Montgomery as to the advisability of performing laparotomy where the symptoms of rupture continued urgent.

Dr. G. BETTON MASSEY, replying to a question put by Dr. Barton, said that the form of electricity depended on the work to be done in a given case. Electricity is called upon for two separate and distinct functions in extra-uterine pregnancy,—to kill the fœtus and to produce its absorption. In the former case a somatic death of the germ contained in the tumor is desired; in the latter merely a molecular death or change. In this latter instance, where the death of the fœtus has occurred, and we merely wish to promote its absorption, together with any effused blood or other material, the indications are almost exactly similar to those of any other intra-abdominal tumor: the current with greatest electrolytic

power—the galvanic—is to be preferred. On the other hand, if we wish to arrest the onward progress of life in the fœtal mass in the interest of the unfortunate mother, that current which will accomplish this object with least danger to the mother is to be preferred. This is undoubtedly the faradic current. Shock must be the quality of value here. It is simply a question of transmitting a sufficiency of shock through the abdominal walls of the mother to the more vital parts of the fœtus. If the ordinary faradic battery were not strong enough, the gravity of these sad cases would even warrant the building of a weak dynamo for the special purpose. As to the method of application: the external percutaneous passage of the current by moistened electrodes would seem to be the best; a vaginal electrode might be used, however, the principal endeavor being to send the current directly through the tumor. Drs. Thomas and Mundé have recently reported a number of cases to the American Gynæcological Society, where successful results had followed the use of electricity. To his mind, however, their remarks, as reported, lacked definiteness in this matter of the choice of current and the exact object desired in the individual case. Dr. Thomas does not advise the use of electricity after the fifth month, but an operation instead. Possibly he anticipates difficulty in then producing death, but this could be overcome by increasing the strength of current in the manner above indicated; even if an operation were afterwards performed, the previous arrest of the placental circulation might be of value.

In response to inquiries from Drs. Hall and Roberts, Dr. MASSEY said that an insulated sound with free extremity would form an excellent vaginal electrode, but that the use of acupuncture needles is totally unnecessary.

Dr. MONTGOMERY, in closing the discussion, said that he had applied one electrode in the vagina in contact with the uterus, and the other over the hypogastrium. He thought acupuncture unnecessary, though it was formerly the practice to use this procedure, as it was liable to cause peritonitis from the liquor amnii escaping into the peritoneal cavity. There is but little difference in the use of either current. There were two reasons why electricity was unavailable after four and a half or five months. The liability to rupture was greatest in the early months,—before the third month. After that we may as well allow the case to go on to a later month, as an operation will be necessary anyway. A large fœtus is more dangerous to the mother after loss of vitality, and cannot be allowed to remain. Although the woman had fallen in the case related, he thought the fœtus was still living, and therefore advised the electricity with the direct purpose to kill. Subsequently the tumor became smaller. The fœtus and appendages become encapsulated in the abdominal cavities of the mothers in these cases. There is no advantage in destroying the fœtus prior to operation.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held November 6, 1884, FORDYCE BARKER, M.D., LL.D., President, in the chair.

The first scientific paper of the evening was read by Dr. R. W. AMIDON, entitled

THE PATHOLOGY OF SENSORY APHASIA, WITH A SPECIMEN.

The history of the case which had come under Dr. Amidon's observation was, in brief, as follows: The patient was a female, aged 60 years, who had been well up to the time of the menopause, nine years before. Since then she had suffered from flatulent dyspepsia, headache, and other evidences of a neurasthenic condition. Six weeks before Dr. Amidon saw her (which was in June, 1883), she had had a severe headache on the left side, which continued for three days, when she became excitable and flighty in mind, and vomiting occurred. When Dr. Amidon made an examination of the patient he found the right pupil larger than the left, the tongue deviated slightly to the right; the right hand was tremulous and had lost strength, but there was no marked disturbance of motility; the fundus oculi appeared healthy, and acuity of vision was normal. The patient gave inappropriate answers to questions, was unable to count or say letters, could not be induced to write, but she could speak intelligibly of her own accord. She recognized all her friends except her husband, and she called her son "father." Hearing was apparently normal. She could sing correctly. After this she was subject to periodical attacks about once a month, when she would utter a cry, throw up the right hand, then the mouth would be drawn to the right, and a general convulsion would follow, sometimes with involuntary evacuations. February 15, 1884, she had one of these attacks. The next day she was comatose, and died in that condition.

At the autopsy the kidneys were found to be the seat of advanced interstitial changes. The right cerebral hemisphere was normal; on the surface of the left there was an irregular depression caused by destruction of cerebral tissue, involving the inferior parietal lobule, the angular gyrus, and the second occipital and first temporal convolutions. The arteries in this region were atheromatous, and one was entirely occluded.

Dr. Amidon then quoted cases, illustrated by diagrams, which had been reported by Balzer, d'Heilly and Chautemesse, A. B. Ball, Chauffard, Giraudeau, Seppilli, and about fourteen others. Of the twenty-four

cases reported, in eight the lesion affected both the visual and auditory cortical regions of the left hemisphere, and there was both word blindness and word deafness. In two cases the area of vision alone was involved, and there was word blindness. In fourteen there was lesion of the auditory region, with word deafness.

Dr. Amidon gave the following conclusions: That *word blindness* is an incapacity to understand speech, printed or written, vision and intelligence being preserved. It is generally dependent upon destructive lesion of parts of the inferior parietal lobule, angular gyrus, and second occipital convolution of the left side. Its mechanism consisted in an abolition of the transformation of written words into verbal images.

Seppilli's conclusions with regard to *word deafness* were that this condition represented a lesion of speech clinically and anatomically distinct from aphasia. It was often associated with amnesic aphasia, motor aphasia, or word blindness. The lesion consisted in a destruction of the first and second left temporal convolutions. The mechanism of word deafness is due to complete abolition of the power of transformation of spoken words into verbal images. Word deafness he considered an indication of great value in locating a lesion of the left temporal lobe.

The second scientific paper of the evening was by Dr. FRANK H. HAMILTON, on

ASIATIC CHOLERA AT SUSPENSION BRIDGE IN 1854, AND ITS LESSONS—WHAT WE KNOW OF CHOLERA.

The author said the present paper was the fulfilment of a promise to the editor of the *Buffalo Medical Journal*, in 1854, sometime to write a paper on the Asiatic cholera as it had prevailed at Suspension Bridge that year. After directing attention to the extreme fatality of the epidemic and its rapid spread among the workmen at Suspension Bridge, the author ascribed the great mortality to the combined effect of elevated temperature, moisture, and recently-upturned alluvial soil. It was at the request of Dr. Rogers that Dr. Hamilton and two other physicians had visited the patients during this epidemic. The following lessons which he had drawn from it were not presented as new, but as being entitled to special notice, in view of the fact that we were liable to have cholera imported into this city at any time. His opinions would be expressed chiefly upon the question of what is the present state of knowledge of the nature, the etiology, the mode of propagation, and the treatment of Asiatic cholera.

First, Dr. Hamilton claimed that we have no positive knowledge of the existence of a specific cholera germ. In 1854, Pacini, an Italian physician, described a germ to the presence of which he ascribed the development of cholera, and recently Koch had discovered the "comma bacillus," which he regarded as the true cholera germ; but after marshalling the facts for and against Koch's hypothesis, and the conflicting observations of others who had investigated the subject, the author stated that, with regard to the theory of Koch, that the comma bacillus was the cause of cholera, he felt justified in the assertion that the claim had not been established.

Even if it were determined that the comma bacillus were always present in cholera, but never in other disease or in health, that of itself would not decide that the bacillus and cholera stood in the relation of cause and effect. Again, the theory was also defective in that it had not been shown that the introduction of this germ into the animal system would produce cholera. The inoculations by Koch himself, practised upon the lower animals, had been barren of results. Again, if it were established that a microbe was the cause of cholera, the question would remain to be answered, Which of the microbes hitherto described, or yet to be discovered, would prove the efficient agent? But it might still remain to be proven, should the experimentalists succeed in producing cholera by the introduction of a fluid containing a germ or germs into the system, whether the efficient agent were the fluid or the germ. It might be the fluid containing the microbe which was the cause of cholera, this fluid having taken on properties which no microscope could detect. The author did not wish to be understood as underestimating the importance of microscopical studies; much useful information had been derived from the microscope in the study of disease, but, so far as the cholera or other epidemic infectious diseases were concerned, microscopists had not taught us any important lessons, either with regard to their cause or their prevention. Germicides kill the microbes when attacked outside of the body, outside of their native soil, but within the body these remedies had no effect upon them. Consequently, patients continued to die of cholera after the discovery of microbes. Moreover, it had not been positively proven that the active agent in the production of the disease resided in the intestines; the symptoms would indicate that it might also exist in the blood.

The cholera germ (using this term in its general signification) might be conveyed from place to place by the clothing or any other textile fabric, by articles of food, or water, or animate or inanimate substance. It might be conveyed a considerable distance by the air, —how far it would be difficult to say; probably much would depend upon the force of the wind and other atmospheric conditions. He had reason to think it could not be thus conveyed farther than a mile or two. The theory of Koch, that the germ only found its way into the system through the mouth and

stomach, was corollary to his theory of causation by the comma bacillus, and that introduction of the virus through the mouth and into the stomach might be one of the means of propagation could be admitted, but that it was the only means the history of epidemics showed not to be true. It was not necessary to assume that because the intestinal secretions were changed, or the mucous membrane congested, the virus was originally implanted in the intestinal canal. The blood and the renal secretion also underwent changes quite as marked as those which took place in the intestinal secretions.

Although the cholera virus were received into the human system, it need not necessarily give rise to cholera. It seemed probable that every person living in a cholera atmosphere received more or less of the virus into the system, but only a small proportion of these persons took sick and died. It was true of all the infectious diseases, that the reception of the virus into the system did not necessarily produce that specific disease. It was also true, however, that a large proportion of those exposed to infectious diseases became infected, whereas only a small proportion of those exposed to cholera took the disease. A suitable soil was necessary. Cholera also differed from other infectious maladies in that one attack did not insure protection against another.

The conditions which protected against cholera were all those which went to prevent disturbance of the alimentary canal; also the avoidance of impure air, overcrowding, bad ventilation, decaying vegetable or animal matter, stagnant water, a warm and moist condition of the atmosphere. The most efficient agent for the propagation of the disease seemed to be the vapors rising from freshly-exposed soil and decaying animal and vegetable matter, together with a warm and moist atmosphere. That filth was not the only efficient cause of the spread of the disease was shown by the fact that during the epidemic at Buffalo those persons living in dirty shanties on a sandy soil by the lake escaped. But there were instances on record which went to show that a favorable condition of the soil and atmosphere alone would not check the spread of the disease if other local conditions sufficiently favored its spread.

The profession had long sought for a specific against Asiatic cholera, but there were really but very few specifics against any diseases, and none had yet been found for infectious diseases. But in the case of scarlet fever, etc., the disease would run a certain course, and we could only seek to conduct the case to a favorable issue; whereas in cholera, if we took it in time, we could often abort it. It was seldom, however, that a patient was saved to whom remedies were not administered until after the period of collapse had arrived. The remedies which had proven most successful were those which had long been known to be most successful in the treatment of diarrhœa, cholera morbus, and analogous affections. The most efficient means prior to the stage of collapse were opium and rest. Dr. Hamilton preferred opium in the solid form to morphine. The patient would be more likely to recover were he removed to a region not favoring the propagation of cholera, and usually it would be found that the disease would not be spread in his new domicile.

It was believed that the cholera was brought to Suspension Bridge by some immigrants, but these people did not, so far as was known, suffer markedly from the disease, either before their arrival at Suspension Bridge or after their departure, which went to prove that the rapid spread and fatality of the affection among the laborers there was due to the condition of the soil and atmosphere. Again, in only a few instances, and in which the topographical conditions were favorable, was the cholera virus carried to and spread in neighboring localities.

Should cholera appear in this city, would it prove as fatal as it had done in Naples and the south of France? Dr. Hamilton answered in the negative, and for the reason that our climate is more favorable, our system of sewerage better, and we had efficient sanitary measures for the prevention of the spread of the disease. He referred to the success attending the efforts of the sanitary commission in stamping out cholera from Blackwell's Island in 1866, and spoke of the efficient work done by Dr. Yale, then one of the house staff.

Dr. L. M. YALE gave some of the circumstances attending the outbreak of cholera on Blackwell's Island in 1866–67, at which time he was interne in one of the institutions. The epidemic was preceded by great heat, by a tendency to diarrhœal affections in the inmates, and it had been the custom to allow the dejections to remain in a tub in the room over night. Removing the unfavorable conditions, the epidemic, which had carried off many of the inmates in the workhouse, was almost immediately and completely checked.

Dr. FRANCIS DELAFIELD thought it would be conceded that cholera was due to some specific virus, and that without that virus cholera would not develop, no matter how favorable the other conditions might be for an outbreak of that disease. As to what was the nature of the specific poison of cholera, after the fashion of the present time to ascribe disease to the presence and development of a germ, cholera had been ascribed by Koch to the comma bacillus. It took time to decide whether a fashion were a good or a bad one. He spoke of the difficulties attending investigations into the bacterial cause of disease, and said that reliance could not be placed on all pretended experiments alike. He should

consider the conditions favoring the development of cholera to be those which also favored diarrhœal affections. He was of opinion that quarantine would not prove an effectual barrier to the spread of cholera.

Dr. A. L. LOOMIS was of the impression that the specific poison of cholera, like that of typhoid fever, must undergo changes after leaving the human system before it would become able to impart cholera to the healthy person. He did not believe that cholera could be developed spontaneously, but that its native place was Bengal, from where all epidemics in different parts of the world could trace their origin. The poison could find admission to the human system by the mucous membrane of either the upper or lower portion of the alimentary tract. It had not been shown that the active specific poison existed only in the secretions from the intestines.

Dr. JOHN C. PETERS showed maps illustrating the spread of cholera from India, and also stated that the efficacy of quarantine had been shown in Denmark, where, so long as quarantine was enforced, cholera had never entered. Greece had also found quarantine effectual against the importation of the poison.

REVIEWS AND BOOK NOTICES.

THE BRAIN AND THE NERVES: THEIR AILMENTS AND THEIR EXHAUSTION. By THOMAS STRETCH DOWSE, M.D. New York, G. P. Putnam's Sons, 1884.

Under this title Dr. Dowse has given to the world one hundred and fifty printed pages, constituting a very readable book, as also one very well worthy of being read; one from which the medical practitioner can gather grain of value, provided said medical practitioner has wit enough to know good grain from bad. The title of the book is misleading, as it is not upon nervous ailments in general, but simply upon nervous exhaustion, a condition again in most cases misnamed, since exhaustion and debility are two different things, and usually it is nervous debility rather than exhaustion which the practitioner is called to meet.

Of all specialties, that of the nerve-exhaustionist seems to lead to the most reckless and dogmatic statement of untruths or disputed truths; probably because there has been so much fog about the subject that those who study it see things distorted and do not recognize that they are enshrouded by it. In the lack of light, they have cultivated most highly their imaginative faculty, accustomed by habit to the mist. Our writer is no exception to this habitual enfogment.

Thus, he bases his work upon the following with other propositions (the italics are his own): "*That man is the highest type of the combination and correlation of all known and unknown forces.*" (If a force is unknown, how can it be known that it enters into a combination which is unknown?) "*That we call this force nervous or vital force,*"—which is simple nonsense; for how can man, to whom "*this force*" evidently refers, be vital force, or how can a combination and a correlation be force?

Again, "That nervous exhaustion is the forerunner and prime agent in the production of all diseases, functional and organic,"—a proposition which we think most of our readers will consider well adapted to excite laughter.

On page 15 we are told "positively that it is *proved* that chloral excites a toning influence upon the arterial web." On page 121, that "it (chloral) has the effect of lowering the tonus of the body and of breaking up the red blood-corpuscles;" that it is also "prejudicial to blood-oxidation and lymph corpuscular assimilation,"—dogmatic assertions, partly true but largely false, worthy to be enframed and set as up frightful examples to young medical writers in the same way as the drunkard adorns the labor of the temperance orator. If our author in his next edition would control this his almost hysterical tendency to literary positivism, and not say "nervous exhaustion is *invariably* associated with rapid breathing," when he means or ought to mean is frequently associated, and would avoid all exaggeration, he would make his book more trustworthy, although perhaps less amusing.

TRANSACTIONS OF THE AMERICAN GYNÆCOLOGICAL SOCIETY. Vol. VIII., for the Year 1883. New York, D. Appleton & Co., 1884. 8vo, pp. 276.

Owing to an oversight, we neglected to notice the appearance of this handsome volume of Transactions at the time it was published. The report of the meeting held at Philadelphia, which appeared in our columns at the time, will serve as an index to the present issue, which contains thirteen essays upon practical topics connected with gynæcic surgery, and two biographical memoirs, besides the usual lists of officers and members, minutes of meeting, and index. The Society is to be congratulated upon the handsome form in which the proceedings are issued, and the editor, Dr. Foster, deserves especial credit for the more prompt appearance of this than had heretofore been the practice with former volumes.

POST-NASAL CATARRH AND DISEASES OF THE NOSE CAUSING DEAFNESS. By EDWARD WOAKES, M.D. Illustrated. Philadelphia, P. Blakiston & Co., 1884. 8vo, pp. 224.

This is the third edition of Woakes's unpretentious little work, which was received with such favor by the profession. Although lim-

ited in its topics selected for discussion to a department of disease which is considered subsidiary to the special domain of the aural surgeon, its subjects are by no means unimportant; and we may be pardoned the statement that it has been principally through the activity of American writers and workers that their proper relations and significance have become recognized. The present work is especially concerned with the author's methods of treatment, which in some instances differ from our own, whether for the better or worse experience will rapidly determine. The chapters devoted to the Pre-Catarrhal State and Taking Cold are of special interest as an indication of the tendency which now exists towards preventive medicine. Whether the treatment be followed or not, no one can read the work without being interested and benefited by it.

GLEANINGS FROM EXCHANGES.

VOGT'S METHOD OF RESECTION OF THE ASTRAGALUS.—An anterior cutaneous incision is made from the tibio-tarsal articular line on the external border of the extensor communis, and directed longitudinally on the tibio-tarsal articulation and dorsum of the foot to Chopart's articulation. The subcutaneous cellular tissue, aponeurosis, and annular ligament are divided, the tendons of the extensor longus digitorum are separated carefully from the subjacent tissues and held firmly to one side, the extensor brevis digitorum is incised and drawn to one side upon the external lip of the wound, the external malleolar artery, and the accompanying veins, are divided between two ligatures.

The articular capsule being incised longitudinally as far as possible, the insertions of the capsule and its ligaments are detached on each side by the raspatorium, the head and neck of the astragalus are denuded, the astragalo-scaphoidean ligaments are divided transversely, so as to disengage the anterior part of the astragalus. Now an incision is made from the middle of the anterior longitudinal incision, which is laterally transverse, and in the adult about ten centimetres long, terminating under the point of the external malleolus, and the soft parts are gradually divided down to the astragalus without interfering with the peroneal tendons.

The foot being forcibly supinated, the peroneo-calcanean ligaments are divided close to the malleolus, and a sharp-pointed bistoury cuts the ligamentous attachment of the sinus of the tarsus, using also, if necessary, a delicate pair of scissors.

The astragalus is brought forward in rotating outward the supinated foot, by seizing the neck of the astragalus with a davier, or by the aid of an elevator placed beneath the bone. A fine pair of scissors introduced between the internal malleolus and the astragalus cuts the large insertion of the internal lateral ligament to the astragalus; a new traction, effected by pressure, carries the astragalus so forcibly outward that its last attachments to the calcaneum at the posterior astragalo-calcanean articulation can be easily divided.

After the ablation of the astragalus, the whole of the articular cavity is exposed, the synovial membranes can be extirpated, and it is easy to remove all parts of the tibia and calcaneum that may be suspicious. After drainage and suture, the superior surface of the calcaneum adapts itself so exactly to the malleolar surfaces as to leave no cavity.—*Journal of the American Medical Association.*

OIL OF GAULTHERIA IN RHEUMATISM.—In the *New York Medical Journal* for November 8 appears an article entitled a New Specific for Rheumatism, in which Dr. H. H. Seelye reports the results obtained from oil of gaultheria given in one hundred and eighteen cases of acute articular rheumatism. It can be administered in capsules, alone or with salicylate of sodium, or in soda-water, but the preferred method was in an emulsion in glycerin and water. From ten to twenty minims were given every two hours during the day, and at intervals of three hours during the night. All forms of rheumatic pain seemed remarkably influenced, but its effect was most marked in acute inflammatory cases. The tendency to cardiac complications seemed not to be increased. The success was so gratifying that further trial of the remedy was strongly urged.

MISCELLANY.

MUNIFICENT GIFT TO THE GERMAN HOSPITAL.—On the 16th instant the new wing of the German Hospital of this city was opened with appropriate ceremonies, in the presence of a large number of distinguished visitors, in the chapel of the new three-story building, which adjoins the old, extending to the south.

Addresses were made by Mr. Lankenau, President of the Board, who formally turned over the building to the Trustees, the donation being acknowledged by Col. M. Richards Mucklé, after which other addresses were made, and the company proceeded to inspect the improvements.

Over the entire old portions of the main building a mansard story had also been erected, and above the extreme western part an entresol has been constructed for storage purposes. Over this is a story fourteen feet high in the clear, containing seven rooms. The old, dark staircase has been opened up to the roof, where a ventilating skylight has been placed, giving a cheerful aspect to the stairs and corridors. The new mansard story

over the eastern portion of the building is seventeen feet high, divided into thirteen apartments. One of these, facing the south, is the Convalescent Ward, twenty by forty feet, opening into a sunny veranda forming a solarium in winter. From this room a fine south view of the city is afforded. The eastern staircase in this portion of the building was also carried up with roof skylight.

Set in the roof or loft are three iron tanks, each sixteen feet long, eight feet wide, and four feet deep, holding in the aggregate nine thousand gallons of water. Besides abundant fire-connections, the hospital is supplied with seventy-two fire-buckets and three Climax chemical fire-extinguishers.

The basement story of the main building has also been materially improved, the kitchen having been enlarged and a new cooking-range, fourteen feet long, placed in it, together with a number of steam-tables.

Running south, at right angles with the old portion, situated at the southwestern corner of the main building, is the new wing, one hundred and twelve feet long and thirty-three feet wide. This extension is surrounded by an area twelve feet in width, giving light and air to the basement, which is five feet below the surface and five feet above it. The walls of the area are built with massive mason-work of Stockton stone, laid in regular range-work, coped with dressed granite, and surmounted by a neat, open wrought-iron railing, the pavement being laid with North River flagstone. The basement is ten feet in the clear, with central corridor, having rubbed flagstone floor, with pipe ducts in the centre. Upon each side of this passage are located apartments for the domestics, some twelve rooms in all.

Above the basement are the three upper stories, each fourteen feet ten inches high, and the mansard story, thirteen feet six inches in height.

At the intersection of the corridors of the several stories of the old and new buildings are the baths and water-closets, all arranged in the most convenient and complete manner. The floors are laid with slate upon brick arches, the plumbing-work being executed with the best materials in a substantial manner, the pipe being exposed in most cases.

The main grand staircase, sixteen by thirty-six feet in size upon the plan, divides the old and new buildings. This portion of the structure it was thought advisable to construct fireproof. The materials employed therein are therefore iron beams with brick arches. The "horses" and framings of the stairs and platforms were built with iron beams, slate risers, steps, platforms, and flooring, and the soffits and ceilings are plastered upon wire mesher-work. All the balusters, hand-railing, newel-posts, and wainscoting are finished in white oak with ash burl panels.

This portion of the building is surmounted by the cupola, having a square base at the roof of twenty-six feet, with hold balustrading and pedestals and arms at the four corners. From this base the cupola proper starts. It is octagonal in form, and finished in the full order of the Ionic style of architecture, having on each of the eight corners a column, with its entablature and blocking courses, terminating with a domed roof and finial, with golden vane and the cardinal points, the top of which stands two hundred and fifty feet above tide-water level. From this balustrade floor is afforded a magnificent view of the entire city.

On the first, second, and third floors of this new wing are wards thirty by eighty-six feet, each having accommodations for sixteen beds. On each of these floors are two anterooms for nurses, kitchens or sewing-rooms, and entrances to the passenger elevator. The first and second floors have bay-windows on the southeast, with seats as rests for the sick. There are large ventilating-rooms at each corner of the wards, those on the north side having steam jets in them. Open grates are set in the south corners. Each ward has ventilating registers, each fourteen by eighteen inches, arranged for top and bottom draughts. For summer use, gas-folding brackets swing into flues in the walls, and are encased in projecting bent-glass screens to keep the heat from the room, while the lower portion is open to draw off the impure air into the flue. This arrangement not only frees the room from the heat of the jets, but the flame acts as a ventilating agent, the heat creating the current of the draught.

There are seven large windows in each of the east and west walls, having double sashes to equalize the external temperature. The transom sashes of these windows are filled with stained glass, with figures of water-plants and other objects neatly designed.

All the steam radiators in the wards are supplied with fresh air from the external atmosphere by open cast-iron flues, walled in, having open gratings in the external walls, and cast-iron pivot doors to close off the draught at pleasure inside. These flues supply the lower portion of the radiator, in place of being set at the top.

The wood-work is of ash, with hard shellac finish, and the washboarding was done with cement.

The operating-room and clinical amphitheatre is situated upon the west of the new south wing, and is entered internally from the main staircase, and externally upon a neat iron stairway. This room is a full circle, the floor being twenty-six feet in diameter. The centre and eastern half is occupied by the operating-space proper. Ample light is afforded by the skylight in the dome or ceiling and one of the Siemens regenerative gas-burners, which consumes fifty cubic feet of gas per hour and gives a light of five hundred

candle-power, and is useful in improving the ventilation. There are also ample side-lights. The floor is laid with encaustic tile, and the walls up to the spring of the cornice are lined with light glazed tiles having an ornamental border. The seating is in ash, with capacity for sixty persons. Attached to this room on the east is a private apartment for the use of the medical staff.

All the buildings are constructed of strong, durable Yardleyville sandstone, laid in range-work, drafted and tool-pointed with cement. It has a warm tone of color, pleasing to the eye. The interior of the walls is faced with hard brick, allowing an open space of two inches to keep the inside dry and to break the external heat, while the roof is triple-pitched and covered with Peach Bottom slate; the top or upper deck has a line of ventilating openings in the cornice-mouldings for drawing off the heat of the lofts. This arrangement has been employed in all of the roofing of the old and new buildings. The dome of the operating theatre is covered with a galvanized iron-pointed pattern of shingling. With the exception of the main wing building, where most of the cornice-work is executed in stone, the cornices of the entire buildings are of galvanized iron.

The fire-escape is on the southwest corner of the new wing building, easy of access. It extends through the several floors, and is constructed of cast and galvanized iron.

The improvements, including the new buildings for the hospital proper, the boiler-house, laundry, etc., and for the Mary J. Drexel home and the grounds, represent a total valuation of more than six hundred thousand dollars, the free gift of Mr. John D. Lankenau, the President of the Board of Trustees.

THE HYDROCHLORATE OF COCAINE has raised quite a furore. Abundant experience has already demonstrated its value as a local anæsthetic in eye-surgery, and it has also been used successfully injected into the skin to facilitate removal of small tumors.

THE first volume of the "American System of Practical Medicine," edited by Prof. Wm. Pepper, it is announced, will be ready for subscribers February 1, 1885.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM NOVEMBER 9, 1884, TO NOVEMBER 22, 1884.

MCKEE, JAMES C., MAJOR AND SURGEON.—Leave of absence extended one month. S. O. 273, A. G. O., November 20, 1884.

BYRNE, C. C., MAJOR AND SURGEON.—Granted four months' leave of absence from November 16, 1884. S. O. 265, A. G. O., November 11, 1884.

GODDARD, C. E., MAJOR AND SURGEON.—Assigned to duty at Fort Yates, Dakota Territory. S. O. 138, Department of Dakota, November 15, 1884.

TREMAINE, W. S., MAJOR AND SURGEON.—Granted leave of absence for one month, on surgeon's certificate of disability. S. O. 233, Department of the East, November 12, 1884.

WILSON, WILLIAM J., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for four months, with permission to go beyond sea, to take effect when his services can be spared by his department commander. S. O. 262, A. G. O., November 7, 1884.

COWDREY, S. G., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 237, Department of the East, November 17, 1884.

HAVARD, VALERY, CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for four months, permission to go beyond sea, to take effect when his services can be dispensed with at his present station. S. O. 268, A. G. O., November 14, 1884.

SHUFELDT, R. W., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty as post surgeon, Fort Wingate, New Mexico. S. O. 217, Department of Missouri, November 4, 1884.

TAYLOR, A. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Fort Omaha, Nebraska, and ordered for duty at Fort D. A. Russell, Wyoming Territory. S. O. 101, Department of the Platte, November 19, 1884.

OWEN, WILLIAM O., JR., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Fort Canby, Washington Territory, and ordered to Fort Spokane, Washington Territory, for duty. S. O. 169, Department of the Columbia, November 4, 1884.

PHILLIPS, JOHN L., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Keogh, Montana Territory. S. O. 134, Department of Dakota, November 5, 1884.

LIST OF CHANGES OF STATIONS OF NAVAL MEDICAL OFFICERS FROM NOVEMBER 9, 1884, TO NOVEMBER 22, 1884.

GROVE S. BEARDSLEY, promoted to the grade of medical inspector, April 24, 1884, November 14, 1884.

P. A. Surgeon A. C. HEFFENGER, duty at Portsmouth, New Hampshire, continued till December 12, 1885, November 11, 1884.

Assistant-Surgeon F. W. F. WIEBER, to the Receiving-Ship "Vermont," at New York, November 12, 1884.

P. A. Surgeon HOWARD E. AMES, detached from the Greely Relief Steamer "Bear," and assigned to special duty in New York, November 17, 1884.

Surgeon GEORGE A. BRIGHT, detached from the "Galena," and placed on waiting orders, November 19, 1884.

Medical Inspector C. J. CLEBORNE, to duty at Philadelphia, Pennsylvania, as member of medical examining boards, November 21, 1884.

Surgeon F. L. DU BOIS, when detached from the Naval Examining Board, November 29, is ordered to the "Galena," November 20, 1884.

P. A. Surgeon EDWARD H. GREEN, detached from the Greely-Relief Steamer "Thetis," and assigned to special duty in New York, November 17, 1884.

Surgeon J. H. HALL, detached from Navy-Yard, Mare Island, and assigned to duty at the naval hospital at that yard, November 19, 1884.

Surgeon JOSEPH HUGG, to the "Minnesota," as relief of Surgeon Woolverton, November 15, 1884.

Assistant-Surgeon WILLIAM MARTIN, to special duty in connection with the New Orleans Exposition, November 19, 1884.

P. A. Surgeon F. S. NASH, detached from the Greely-Relief Steamer "Alert," and assigned to special duty in New York, November 17, 1884.

Surgeon W. J. SIMON, to the Philadelphia Hospital for treatment, November 17, 1884.

Surgeon T. WOOLVERTON, detached from the "Galena," and placed on waiting orders for sea-service, November 15, 1884.